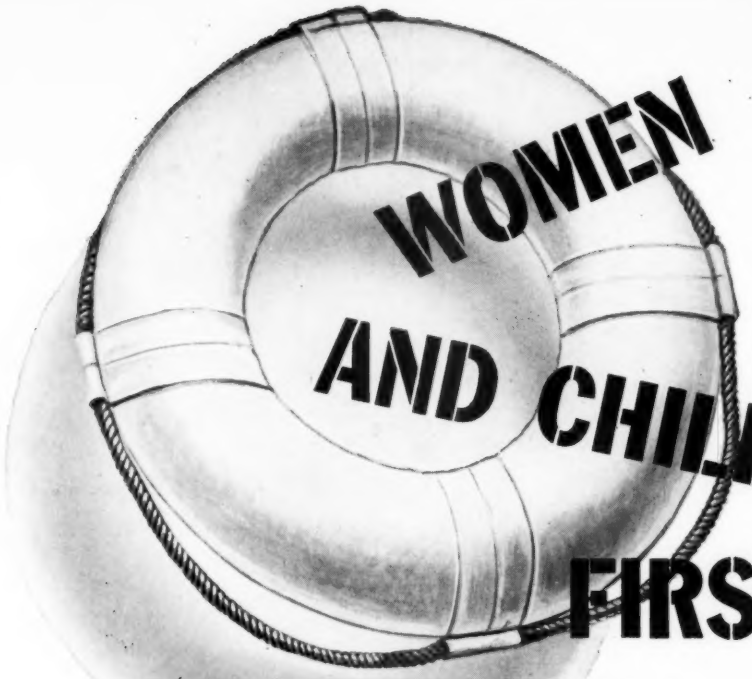
VOLUME 6 • DECEMBER 1951 • NUMBER 12

Journal of the AMERICAN MEDICAL WOMEN'S ASSOCIATION

Library of Boston University
School of Medicine
80 E. Concord St.,
Boston, Mass.

LIBRARY
BOSTON UNIVERSITY
SCHOOL OF MEDICINE

Official Publication of



WOMEN AND CHILDREN FIRST!

Protection of women and children has always been the first thought of man in the face of any emergency.

Less glamorous than the sinking ship or devastating fire, but far more common, are the dietary emergencies faced by women during pregnancy and by growing children. To protect women and children against vitamin and mineral deficiencies, Winthrop-Stearns offers CALIRAD *Super*. Each easy-to-swallow, soft gelatin capsule contains:

Vitamin A	1500 U.S.P. units
Vitamin B_1 (thiamine HCl)	1 mg.
Vitamin B_2 (riboflavin)	1 mg.
Nicotinamide	8 mg.
Vitamin C (ascorbic acid)	30 mg.
Vitamin D_2 (calciferol)	300 U.S.P. units
Menadione (vitamin K analogue)	0.15 mg.
Dibasic calcium phosphate (anhydrous)	0.568 Gm.
Ferrous gluconate	50 mg.
Potassium iodide	0.1 mg.

CALIRAD® *Super*

Available in bottles of 50 and 250 capsules.

Although primarily formulated to meet the needs of pregnant and nursing mothers and growing children, CALIRAD *Super* is also prescribed for patients before and after surgery, during febrile diseases, general convalescence, for aged individuals without teeth, patients with dysphagia, achlorhydria, anorexia, nausea, vomiting, and alcoholism, and persons on restricted diets.

Winthrop-Stearns INC. NEW YORK 18, N. Y. WINDSOR, ONT.

CALIRAD, trademark reg. U.S. & Canada

Rapid Clinical Response

WITH

Chloromycetin®

MEANS EARLY RETURN TO NORMAL ACTIVITIES

Continuity of treatment with well-tolerated CHLOROMYCETIN produces a rapid clinical response in a wide variety of bacterial, viral, and rickettsial diseases. Convalescence is smooth, and an early return of the patient to his normal activities may be anticipated.

CHLOROMYCETIN (chloramphenicol, Parke-Davis)
is supplied in the following forms:

CHLOROMYCETIN Kapseals,® 250 mg., bottles of 16 and 100.

CHLOROMYCETIN Capsules, 100 mg., bottles of 25 and 100.

CHLOROMYCETIN Capsules, 50 mg., bottles of 25 and 100.

CHLOROMYCETIN Ophthalmic Ointment, 1%, ⅛ ounce collapsible tubes.

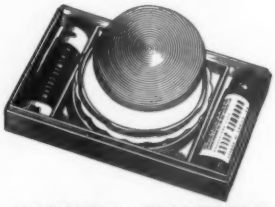
CHLOROMYCETIN Ophthalmic, 25 mg. dry powder for solution, individual vials with droppers.

PARKE, DAVIS & COMPANY

MEDICAMENTA VERA

DOCTOR, IT ALL STARTS WITH THE DIAPHRAGM

When the physician prescribes KOROMEX, his choice has been literally assured... of satisfaction and safety to the patient. ➢ ➢ Since 1925, KOROMEX has not only pioneered the way to personal feminine hygiene, but with its scientific development and promotion of sound design and material, has established a formula for safety.



KOROMEX DIAPHRAGM
...AN ACCEPTED
STANDARD OF QUALITY

ACTIVE INGREDIENTS: BORIC ACID 2.0% OXYQUINOLIN BENZOATE 0.02% AND PHENYLMERCURIC ACETATE 0.02% IN SUITABLE JELLY OR CREAM BASES

KOROMEX®

A CHOICE OF PHYSICIANS

HOLLAND-RANTOS COMPANY, INC. • 145 HUDSON ST., NEW YORK 13, N. Y.

MERLE L. YOUNGS, PRESIDENT

Journal of the AMERICAN MEDICAL WOMEN'S ASSOCIATION

Official Monthly Publication of the American Medical Women's Association, Inc.

VOLUME 6 | DECEMBER, 1951 | NUMBER 12

Special Number

WOMAN'S MEDICAL COLLEGE OF PENNSYLVANIA

SCIENTIFIC ARTICLES

ACTH and Cortisone in Ocular Disease, *Grace R. Nachod, M.D.* 453
The Cancer Problem: Correlation of Investigational Data, *Machteld E. Sano, M.D.* 456
Dysfunctional Uterine Bleeding, *Sarah E. Sykes, M.D.* 460
Recent Advances in Dermatology, *Carmen C. Thomas, M.D., Sc.D. (Med.)* 464

CASE REPORTS

Cystic Fibrosis of the Pancreas, *Benjy Brooks, M.D.* 468
Moniliasis: Side Effect of Antibiotic Therapy, *Emma Dowling Kyhos, M.D.* 470

SPECIAL ARTICLES

The Privileges of Medicine, *Burgess Gordon, M.D.* 472
The Training of the Medical Student
I. Pre-professional Education, *Irene E. Maher, M.D.* 474
II. Trends in Medical Education, *Marion Fay, Ph.D.* 475
Role of the Student Health Service in a Medical College, *June F. Klinghoffer, M.D.* 477
Medical Women in Foreign Missions, *Edith F. Millican, M.D.* 478

REGULAR FEATURES

World Health Organization, Current Activities 481
With A.M.W.A. Around the World
Experiment in World Friendship, *Margaret Ray* 482
News of Women in Medicine 488
News from the Branches 491
These Were the First, *Elizabeth Bass, M.D.* 491
Book Notices 492

ASSOCIATION NEWS AND ANNOUNCEMENTS

Message from the President, *Amey Chappell, M.D.* 485
New Members 485
Report of Committee on Opportunities for Medical Women, *Dorothy W. Atkinson, M.D.* 486

MISCELLANEOUS

Opportunities 484, 486, 487
Editorial Board ..... Adv. pg. 4
Officers of A.M.W.A. ..... Adv. pg. 6
Branch Officers ..... Adv. pg. 8
Index of Advertisers ..... Adv. pg. 10
International Correspondents ..... Adv. pg. 12
Editorial Forecast ..... Adv. pg. 20
Index Volume 6 495

Neither the Editor nor the Publisher of the Journal of the American Medical Women's Association is responsible for any statements made or opinions expressed by any of its contributors.

JOURNAL OF THE AMERICAN MEDICAL WOMEN'S ASSOCIATION is published monthly by the American Medical Women's Association, Inc., at 136 4th Ave., Nashville 3, Tenn. Entered as second class matter at the Post Office at Nashville, Tennessee, under the Act of August 24, 1912. Acceptance for mailing at special rates of postage provided for in Section 1102, Act of October 8, 1917, and authorized July 15, 1918.

Copyright 1951 by the American Medical Women's Association, Inc.

Subscription, $5.00 per year; $1.00 single copy.
EDITORIAL AND ADVERTISING OFFICE, Journal of the American Medical Women's Association, Suite 210, 2 Lexington Avenue, New York 10, N. Y. Telephone ALgonquin 4-9745.

JOURNAL OF THE AMERICAN MEDICAL WOMEN'S ASSOCIATION
Suite 210, Two Lexington Avenue, New York 10, N. Y.

Editorial Board

JANET K. AITKEN, C.B.E., M.D., F.R.C.P.....*London, England*
INES L. C. DE ALLENDE, M.D.....*Cordoba, Argentina*
LEONA BAUMGARTNER, M.D.....*New York, N. Y.*
CARROLL LAFLEUR BIRCH, M.D.....*Chicago, Ill.*
NINA FAY CALHOUN, M.D.....*Dallas, Texas*
MARY M. CRAWFORD, M.D.....*New York, N. Y.*
BEULAH CUSHMAN, M.D.....*Chicago, Ill.*
MARIA PAUMGARTTEN DEANE, M.D.....*Belem, Para, Brazil*
GLADYS H. DICK, M.D.....*Chicago, Ill.*
DELLA GAY DRIPS, M.D.....*Rochester, Minn.*
FAITH S. FETTERMAN, M.D.....*Philadelphia, Pa.*
RITA S. FINKLER, M.D.....*Newark, N. J.*
GRACE A. GOLDSMITH, M.D.....*New Orleans, La.*
EDNA M. GUEST, O.B.E., M.D.....*Toronto, Canada*
ANNA HUBERT, M.D.....*New York, N. Y.*
HELEN JOHNSTON, M.D.....*Des Moines, Iowa*
ZOE ALLISON JOHNSTON, M.D.....*Pittsburgh, Pa.*
MARGARET H. JONES, M.D.....*Los Angeles, Calif.*
JOSEPHINE H. KENYON, M.D.....*New York, N. Y.*
ELIZABETH KITTREDGE, M.D.....*Washington, D. C.*
LEILA C. KNOX, M.D.....*New York, N. Y.*
IRENE A. KOENEKE, M.D.....*Halstead, Kansas*
ESTHER P. LOVEJOY, M.D.....*New York, N. Y.*
CATHARINE MACFARLANE, M.D.....*Philadelphia, Pa.*
HELEN MACMURCHY, C.B.E., M.D.....*Toronto, Canada*
MINNIE LEE MAFFETT, M.D.....*Dallas, Texas*
DAME A. LOUISE MCILROY, O.B.E., M.D.....*London, England*
HARRIETT C. MCINTOSH, M.D.....*New York, N. Y.*
ANITA M. MUHL, M.D.....*San Diego, Calif.*
DOROTHY KLENKE NASH, M.D.....*Pittsburgh, Pa.*
LOUISE PEARCE, M.D.....*Princeton, N. J.*
GILDA PERAZA, M.D.....*Havana, Cuba*
ELLEN C. POTTER, M.D.....*Trenton, N. J.*
BARBARA B. STIMSON, M.D.....*New York, N.Y.*
CARMEN C. THOMAS, M.D., D.Sc. (Med.).....*Philadelphia, Pa.*
MARGARET C. TOD, F.R.C.S.E., F.F.R.....*Manchester, England*
EDNA H. TOMPKINS, M.D.....*Boston 8, Mass.*
RUTH WELLS, M.D.....*Pasadena, Calif.*
PRISCILLA WHITE, M.D.....*Boston, Mass.*
KATE SAVAGE ZERFOSS, M.D.....*Nashville, Tenn.*

Specialists

Anesthesia.....LOIS L. WELLS, M.D., *Oklahoma City, Okla.*
Gynecology.....ELOISE PARSONS, M.D., *Chicago, Ill.*
Medicine.....MARION N. GIBBONS, M.D., *Shaker Heights, Ohio*
Obstetrics.....ISABEL KNOWLTON, M.D., *New York, N. Y.*
Orthopedic Surgery.....RUTH JACKSON, M.D., *Dallas, Texas*
Pathology.....SOPHIE SPITZ, M.D., *New York, N. Y.*
Pediatrics.....MAY BORQUIST GUY, M.D., *Seattle, Wash.*
Psychiatry.....JOAN FLEMING, M.D., *Chicago, Ill.*
Public Health.....HELEN M. WALLACE, M.D., *New York, N. Y.*
Radiology.....HARRIETT C. MCINTOSH, M.D., *New York, N. Y.*
Surgery.....MARGARET STANLEY-BROWN, M.D., *New York, N. Y.*

EDITOR
ADA CHREE REID, M.D.
New York, N. Y.

ASSOCIATE EDITOR
DOROTHY W. ATKINSON, M.D.
San Francisco, Calif.

EDITORIAL CONSULTANT
ELISE S. L'ESPERANCE, M.D.
New York, N. Y.

DEPARTMENTAL EDITORS
Recent Advances in Medicine
PATRICIA TUDBURY, M.D.
Visalia, Calif.

Modern Concepts of Physiology
ESTHER M. GREISHEIMER, M.D.
Philadelphia, Pa.

Developments in Diagnosis
CARROLL LAFLEUR BIRCH, M.D.
Chicago, Ill.

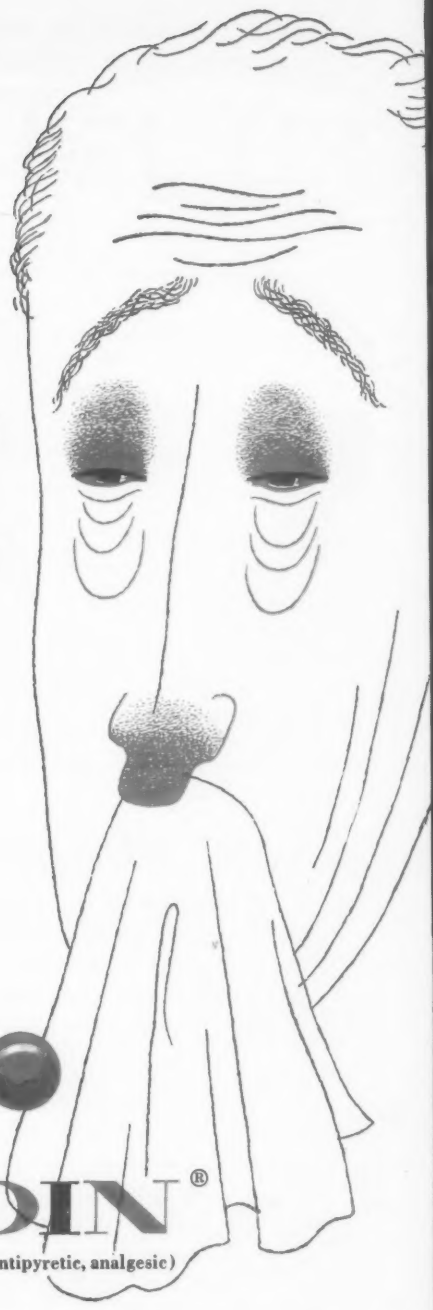
Seminars on Therapy
FRIEDA BAUMANN, M.D.
Philadelphia, Pa.

Reports of Proceedings
MARGARET S. TENBRINCK, M.D.
New York, N. Y.

News of Women in Medicine
MARCELLE BERNARD, M.D.
New York, N. Y.

Medical School Student News
EVA F. DODGE, M.D.
Little Rock, Ark.

Chairman of Publication Committee, ELIZABETH WAUGH, M.D., Philadelphia, Pennsylvania



the sooner-**CORICIDIN**

the better-**CORICIDIN**

Greatest likelihood of aborting and mitigating symptoms of the common cold follows *early* use of CORICIDIN. Containing chlorprophenpyridamine maleate — the antihistamine that is effective in the smallest dosage — CORICIDIN is gratifyingly devoid of significant side effects.

CORICIDIN®

(antihistamine, antipyretic, analgesic)

Schering CORPORATION
Bloomfield, New Jersey

CORICIDIN

AMERICAN MEDICAL WOMEN'S ASSOCIATION
1951-1952

OFFICERS

President: AMEY CHAPPELL, M.D., 795 Peachtree St., N.E., Atlanta, Georgia.
President-Elect: EVANGELINE STENHOUSE, M.D., 55 East Washington St., Chicago 2, Illinois.
Retiring President: ELIZABETH S. WAUGH, M.D., 348 Green Lane, Philadelphia 28, Pennsylvania
First Vice-President: ANTOINETTE LEMARQUIS, M.D., 1207 Medico-Dental Building, San Diego, California
Second Vice-President: CAMILLE MERMOD, M.D., 15 Washington St., Newark 2, New Jersey.
Treasurer: ADELAIDE ROMAINE, M.D., Box 98, Madison Square Station, New York 10, N. Y.
Assistant Treasurer: JUDITH AHLEM, M.D., 954 South L St., Livermore, California.
Recording Secretary: ESTHER C. MARTING, 2314 Auburn Ave., Cincinnati, Ohio.
Corresponding Secretary: LUCILLE MARSH, M.D., 1168 Briarcliff Road, N.E., Atlanta, Georgia.

* * *

National Corresponding Secretary to the Medical Women's International Association:
MARGARET M. WURTS, M.D., 27 East Wellesley Rd., Montclair, N. J.

REGIONAL DIRECTORS

North Atlantic (New York, Pennsylvania, New Jersey, Delaware):
ADELAIDE ROMAINE, M.D., 35 West 9th Street, New York 11.
Middle Atlantic (Maryland, District of Columbia, Virginia, West Virginia, Foreign):
ELIZABETH KAHLER, M.D., 3828 Fulton Street, N.W., Washington 7, D.C.
South Atlantic (North Carolina, South Carolina, Georgia, Florida, Puerto Rico):
JEAN JONES PERDUE, M.D., 541 Lincoln Road, Miami Beach 41, Florida.
Northeast Central (Ohio, Indiana, Michigan, Illinois, Wisconsin):
KATHERINE W. WRIGHT, M.D., 811 Lincoln Street, Evanston, Illinois.
Southeast Central (Kentucky, Tennessee, Alabama, Mississippi, Louisiana):
GEORGIANNA VON LANGERMANN, M.D., 1430 Tulane Avenue, New Orleans 13, Louisiana.
Northwest Central (Minnesota, Iowa, North Dakota, South Dakota, Nebraska):
NELLIE M. BARSNESS, M.D., 540 Lowry Medical Arts Building, St. Paul 2, Minnesota.
Southwest Central (Missouri, Arkansas, Kansas, Oklahoma, Texas):
RUTH ELLIS LESH, M.D., 221 North College Avenue, Fayetteville, Arkansas.
Northwest (Montana, Wyoming, Idaho, Washington, Oregon, Alaska):
MIRIAM LUTEN, M.D., 105 N.E. 61st Street, Portland 16, Oregon.
Southwest (Colorado, New Mexico, Utah, Arizona, California, Nevada, Hawaii, Philippine Islands):
ANTOINETTE LE MARQUIS, M.D., 1207 Medico-Dental Building, San Diego, California.

Through The Menstrual Years of Life-
THE frequency with which the menstrual life of so many women is marred by functional aberrations that pass the borderline of physiologic limits, emphasizes the importance of an effective uterine tonic and regulator in the practicing physician's armamentarium.
In ERGOAPIOL (Smith) with SAVIN the action of all the alkaloids of ergot (prepared by hydro-alcoholic extraction) is synergistically enhanced by the presence of apiol and oil of savin. Its sustained tonic action on the uterus provides welcome relief by helping to induce local hyperemia, stimulating smooth, rhythmic uterine contractions and serving as a potent hemostatic agent to control excessive bleeding.
May we send you a copy of the booklet "Menstrual Disorders", available with our compliments to physicians on request.
MARTIN H. SMITH COMPANY
150 LAFAYETTE STREET, NEW YORK 13, N. Y.
INDICATIONS
Amenorrhea, dysmenorrhea, menorrhagia, metrorrhagia and in obstetrics.
DOSAGE
1-2 cap. 3-4 times daily.
SUPPLIED
In ethical pkgs. of 20 cap.
ERGOAPIOL (SMITH) with SAVIN
• • THE PREFERRED UTERINE TONIC • •

So inviting in flavor, color and aroma . . .

MULCIN

puts a smile in the vitamin spoon

1 PINT (473 CC.)
MULCIN
A PALATABLE EMULSION OF VITAMINS A, D, C, THIAMINE, RIBOFLAVIN AND NIACINAMIDE
CONTAINS ALCOHOL 5 PERCENT
MEAD'S
MEAD JOHNSON & CO.
EVANSVILLE, IND., U.S.A.

Vitamin time becomes a happy time when young patients see Mulcin coming! The refreshing orange flavor, pleasant aroma and sunny yellow color of this vitamin emulsion bring bright smiles to their faces.

Mulcin's texture is smooth and light, with no trace of stickiness. Pouring is easy. Stable at room temperature, Mulcin needs no refrigeration.

EACH TEASPOON OF MULCIN SUPPLIES:

Vitamin A	3000 units
Vitamin D	1000 units
Thiamine	1.0 mg.
Riboflavin	1.2 mg.
Niacinamide	8.0 mg.
Ascorbic Acid	50 mg.

Available in 4 oz. and economical 1 pint bottles.

Children like taking Mulcin directly from the spoon. For infants, Mulcin may be mixed with formula, fruit juice or water.

A product of true pharmaceutical elegance and maximum acceptability, Mulcin is a distinguished member of Mead's vitamin family.

MEAD'S

MEAD JOHNSON & CO.
EVANSVILLE 21, IND., U. S. A.

An achievement in pharmaceutical elegance

AMERICAN MEDICAL WOMEN'S ASSOCIATION

1951-52

BRANCH OFFICERS

ONE, WASHINGTON, D. C.

President: Dorothy B. Holmes, M.D., 1816 R Street, N.W., Washington 9.
Secretary: Dorothy Donley-Dowd, M.D., 2311 Connecticut Ave., N.W., Washington 8.
Meetings held second Tuesday, October to May.

TWO, CHICAGO, ILLINOIS

President: Emilia Guiryotas, M.D., 8 So. Michigan Ave., Chicago.
Secretary: Margaret Stanton, M.D., 5625 W. Division St., Chicago.
Meetings held monthly.

THREE, MARYLAND

President: Eleanor Scott, M.D., 1014 St. Paul St., Baltimore.
Secretary: Byruth Lenson-Lambros, M.D., 1224 Bloomingdale Road, Baltimore 16.
Meetings held first Thursday of month.

FOUR, NEW JERSEY

President: M. Eugenia Geib, M.D., 1277 Clinton Place, Elizabeth.
Secretary: Amy S. Barton, M.D., Medford Lakes.
Meetings held twice a year, fall and spring.

FIVE, PORTLAND, OREGON

President: Miriam Luten, M.D., 105 N. E. 61st St., Portland.
Secretary: Laura Ladd, M.D., Medical Arts Bldg., Portland.
Dinner meetings held every two months, with a symposium on scientific topics of general interest.

SIX, OMAHA, NEBRASKA

President: Nancy Catania, M.D., 418 Brandeis Theatre Bldg., Omaha.
Secretary: Muriel Frank, M.D., 4353 Dodge St., Omaha.

EIGHT, NEW ORLEANS, LOUISIANA

President: Georgiana J. von Langermann, M.D., 1430 Tulane Avenue, New Orleans.

TEN, WISCONSIN

President: Edith McCann, M.D., 425 E. Wisconsin Ave., Milwaukee 2.
Secretary: Alice D. Watts, M.D., 324 E. Wisconsin Ave., Milwaukee 2.

ELEVEN, SOUTHWESTERN OHIO

President: Esther C. Marting, M.D., 2314 Auburn Avenue, Cincinnati 9.
Secretary: Rachel Braunstein, M.D., Given Road, Cincinnati.
Meetings held second Tuesday, September, November, January, March, May.

THIRTEEN, SAN DIEGO, CALIFORNIA

President: Anita V. Figueredo, M.D., 7603 Girard Avenue, La Jolla.
Secretary: Bernice B. Ennis, M.D., Rancho Santa Fe.
Meetings held every other month on fourth Thursday.

FOURTEEN, NEW YORK, NEW YORK

President: Leoni N. Claman, M.D., 40 East 88th St., New York 28.
Secretary: Margaret S. Tenbrinck, 235 East 22nd St., New York 10.
Ten monthly Executive Committee meetings, two dinner meetings.

FIFTEEN, CLEVELAND, OHIO

President: Jane McCollough, M.D., 2576 Traymore, University Heights.
Secretary: Elizabeth Lash, M.D., 3044 Coleridge Road, Cleveland Heights 18.

SIXTEEN, PITTSBURGH, PENNSYLVANIA

President: Theodora Dakin, M.D., Murraysville.
Secretary: Catharine M. Clarke, M.D., 509 Grove Street, Sewickley.

NINETEEN, IOWA

President: Maryelda Rockwell, M.D., 220 Tucker Building, Clinton.
Secretary: Mary Louise Lyons, M.D., Iowa Methodist Hospital, Des Moines.
Meetings held each April, in conjunction with state medical meeting.

TWENTY (BLACKWELL), DETROIT, MICHIGAN

President: Martha E. Madsen, M.D., 1821 Woodsboro Dr., Royal Oak.
Secretary: Louise A. Kozlow, M.D., 1050 Fisher Bldg., Detroit 2.
Meetings held five times a year.

TWENTY-THREE, LOS ANGELES, CALIFORNIA

President: V. Cecile Chavannes, M.D., 3809½ Main St., Culver City.
Secretary: Margaret Ann Storkan, M.D., 3875 Wilshire Blvd., Los Angeles.

Preceptin®

VAGINAL GEL

the simple method of contraception used without a diaphragm...

Physicians and patients have long been demanding a simpler contraceptive method than jelly *and* diaphragm.

built on a new base

To replace the function of the diaphragm, a new and better physical barrier, incorporated into the Gel itself, was needed — one that could be depended on to cover the cervical os effectively. The new base of PRECEPTIN, achieved by blending recently developed synthetic gel-forming agents, meets this requirement, making it possible to do away with the diaphragm.

clinically proved

Of 3270 patients using Preceptin Gel — 99.2 percent received complete protection.

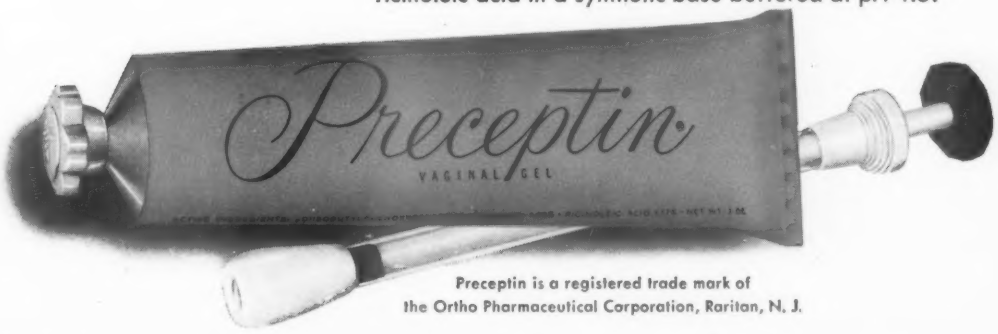
Preceptin's new base:

1. **adheres well to the moist cervical mucosa — forms a persistent, adherent physico-chemical barrier over the cervical os.**
2. **is more miscible with semen — means greater spermicidal potency.**
3. **rapidly releases active spermicides — enables Preceptin to kill sperm on contact.**

Preceptin Vaginal Gel

Used with measured-dose applicator.

COMPOSITION: PRECEPTIN contains the active spermicidal agents p-Diisobutylphenoxypolyethoxyethanol and ricinoleic acid in a synthetic base buffered at pH 4.5.



Preceptin is a registered trade mark of the Ortho Pharmaceutical Corporation, Raritan, N. J.

in bacterial vaginitis

Triple Sulfa Cream
TRADE MARK

eliminates vaginal discharge

by controlling the cause

in mixed vaginal infections

"The subjective symptom of discharge was cured."[1]

following cervical cautery

"The absence of usual post-cautery discharge and bleeding was very striking."[1]

following vaginal plastic surgical procedures

"One of the most annoying symptoms, the malodorous discharge was found nonexistent in all the treated cases."[2] The outstanding relief of this distressing symptom reflects the control of a wide variety of vaginal pathogens achieved by the combined sulfonamides* in Triple Sulfa Cream.

Triple Sulfa Cream
TRADE MARK

is available in 3 oz. tubes. On original prescriptions specify "Triple Sulfa Cream with applicator."

*Sulfathiazole, N'acetylsulfanilamide, N'benzoylsulfanilamide.

1. Marbach, A. H.: Am. J. Obst. & Gynec. 55:511, 1948.
2. Blinick, G.; Steinberg, P., and Merendino, J. V.: Am. J. Obst. & Gynec. 58:176, 1949.

Ortho Pharmaceutical Corporation, Raritan, New Jersey

Gynecic Pharmaceuticals

ortho

a NEW strength of 'Eskacillin':

'Eskacillin 250'

250,000 units of procaine penicillin G per teaspoonful

effective with only 3 doses daily

why 'Eskacillin 250' contains procaine penicillin:

a. ***Palatability.*** Large concentrations of the highly insoluble procaine salt of penicillin can be incorporated in a liquid vehicle without becoming unpalatable.

b. ***No need for refrigeration.*** Because of the insolubility of procaine penicillin, 'Eskacillin 250' is far more stable than other preparations.

c. ***Rapid absorption.*** Although procaine penicillin is absorbed slowly when given parenterally, it is absorbed rapidly from the gut.

Now there are 3 strengths of 'Eskacillin': 'Eskacillin 250' (new); 'Eskacillin 100', containing 100,000 units of penicillin per 5 cc. (1 teaspoonful); and 'Eskacillin 50', containing 50,000 units of penicillin per 5 cc. (1 teaspoonful). All are available in 2 fl. oz. bottles.

Smith, Kline & French Laboratories, Philadelphia

'Eskacillin' T. M. Reg. U. S. Pat. Off.

1951-52 BRANCH OFFICERS, Continued

TWENTY-FOUR, KANSAS

President: Mary T. Glassen, M.D., Phillipsburg.
Secretary: Ruth P. Spiegel, M.D., Formosa.
Next meeting will be held on call.

TWENTY-FIVE, PHILADELPHIA, PENNSYLVANIA

President: Marion Kolbye, M.D., 618 W. Lehigh Ave., Philadelphia.
Secretary: Naomi Green, M.D., 401 S. 22nd St., Philadelphia.
Meetings held three times a year.

TWENTY-SIX, MINNESOTA

President: Helen Haberer, M.D., 607 Medical Arts Bldg., Minneapolis.
Secretary: Catherine Burns, M.D., 204 Medical Arts Bldg., Albert Lea.

TWENTY-NINE, ATLANTA, GEORGIA

President: Rose A. Lahman, M.D., 795 Peachtree Street, Atlanta.
Secretary: L. Margaret Green, M.D., Crawford Long Memorial Hospital, Atlanta 3.
Meetings held third Saturday, alternate months.

THIRTY, UPPER CALIFORNIA

President: Grace Talbott, M.D., 909 Hyde St., San Francisco.
Secretary: Else Cabos, M.D., 3510 Sacramento St., San Francisco.

THIRTY-ONE, MISSISSIPPI

President: Eva L. McLorn, M.D., 964 N. State St., Jackson.
Secretary: Ruth R. Burroughs, M.D., 2912 N. State St., Jackson.
One meeting a year is held with Mississippi State Medical meeting.

THIRTY-TWO, WESTERN NORTH CAROLINA

President: Mary Michel, M.D., Waynesville.

THIRTY-THREE, FLORIDA

President: Ruth Rumsey, M.D., 7521 Biscayne Blvd., Miami.
Secretary: Ella Hediger, M.D., 560 N. E. 71st St., Miami.

THIRTY-FOUR, ARKANSAS

President: Martha M. Brown, M.D., State Hospital, Little Rock.
Secretary: Alice Gamble-Beard, M.D., Little Rock.

THIRTY-FIVE, PUERTO RICO

President: Alice Reinhardt, M.D., Sanatorio Insula, Rio Piedros.
Secretary: Maria Amelia Pares, M.D., Professional Building, Santurce.

THIRTY-SIX, ALAMEDA COUNTY, CALIFORNIA

President: Miriam Rutherford, M.D., 2929 Summit St., Oakland.
Secretary: Dorothy McDonald, M.D., 2490 Channing Way, Berkeley.

THIRTY-SEVEN, SEATTLE, WASHINGTON

President: Phyllis Leibly, M.D. 4530-51st St., N.E., Seattle.
Secretary: Lily E. Schoffman, M.D., 828 Fourth and Pike Bldg., Seattle.

THIRTY-EIGHT, LONG BEACH, CALIFORNIA

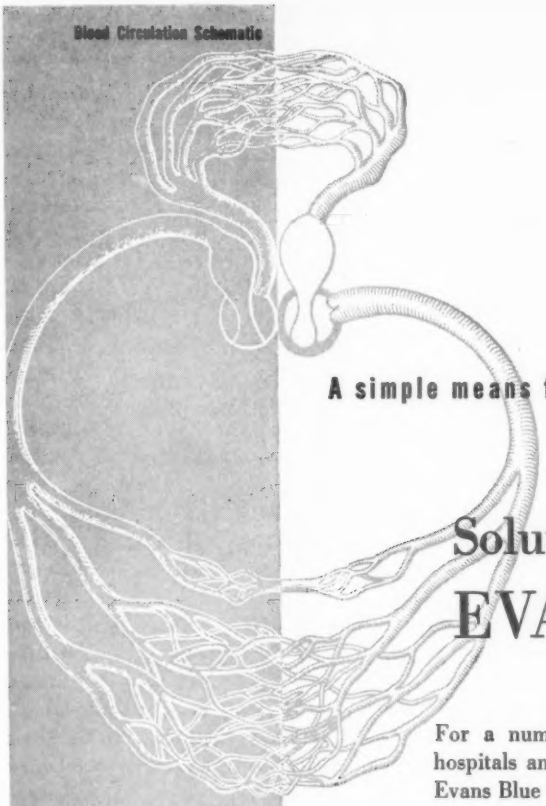
President: Geneva Beatty, M.D., 901-2 Security Bldg., 110 Pine Street, Long Beach 2.
Secretary: Pearl M. Sampson, M.D., 215 American Avenue, Long Beach.

THIRTY-NINE, BOSTON, MASSACHUSETTS

President: Marion W. Perry, M.D., 88 Scotland Road, Reading.
Secretary: Merry Pitman, M.D., 181 Adams Street, Quincy 69.

Below is noted a list of the firms who at the present time are advertising in the JOURNAL OF THE AMERICAN MEDICAL WOMEN'S ASSOCIATION. We appreciate their interest in our publication and ask our members to favor them whenever possible.

Abbott Laboratories
Ayerst, McKenna & Harrison, Ltd.
Beech-Nut Packing Company
S. H. Camp and Company
Coca-Cola Company
Desitin Chemical Co.
Eaton Laboratories, Inc.
Florida Citrus Commission
Hoffman-La Roche, Inc.
Holland-Rantos Co., Inc.
Johnson & Johnson
Eli Lilly & Company
Mead Johnson Company
Merck & Company, Inc.
Philip Morris & Co., Ltd., Inc.
Ortho Pharmaceutical Corporation
Parke, Davis & Company
Chas. Pfizer & Co., Inc.
Picker X-Ray Corporation
Schering Corporation
Julius Schmid, Inc.
Smith, Kline & French Laboratories
E. R. Squibb and Sons
Martin H. Smith Company
Tampax, Incorporated
Upjohn Company
Warner-Hudnut, Inc. (Medical Prod. Div.)
Winthrop-Stearns, Inc.



A simple means for accurate determination

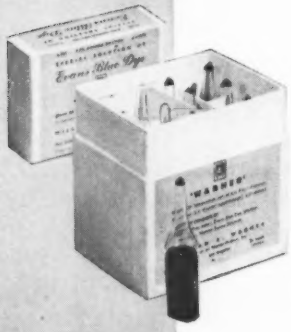
of the circulating blood volume

Solution of
EVANS BLUE DYE
'WARNER'

For a number of years Warner has provided research hospitals and laboratories with exceptionally pure, refined Evans Blue Dye for blood volume determinations. The constant and ever increasing demand for the preparation has led to its commercial availability in the most economical and practical form possible—ampuls for intravenous injection.

The various applications of Evans Blue Dye ampuls in determination of circulating blood volume are extensive:

An answer to thousands of requests



Surgery—pre- and postoperatively • Shock • Acute and chronic hemorrhagic states • Hepatic disease • Cardiovascular and renal diseases • Electrolyte and fluid balance analyses • Endocrine disturbances • Anemias, leukemias and other blood disorders • Exchange and replacement transfusions • Parasitic blood diseases • Obstetrics •

A 0.5% aqueous solution of EVANS BLUE DYE 'Warner' is available in 5-cc. ampuls (with twin 5-cc. ampuls of Normal Saline Solution)—cartons of 6 ampuls of each and 25 ampuls of each.

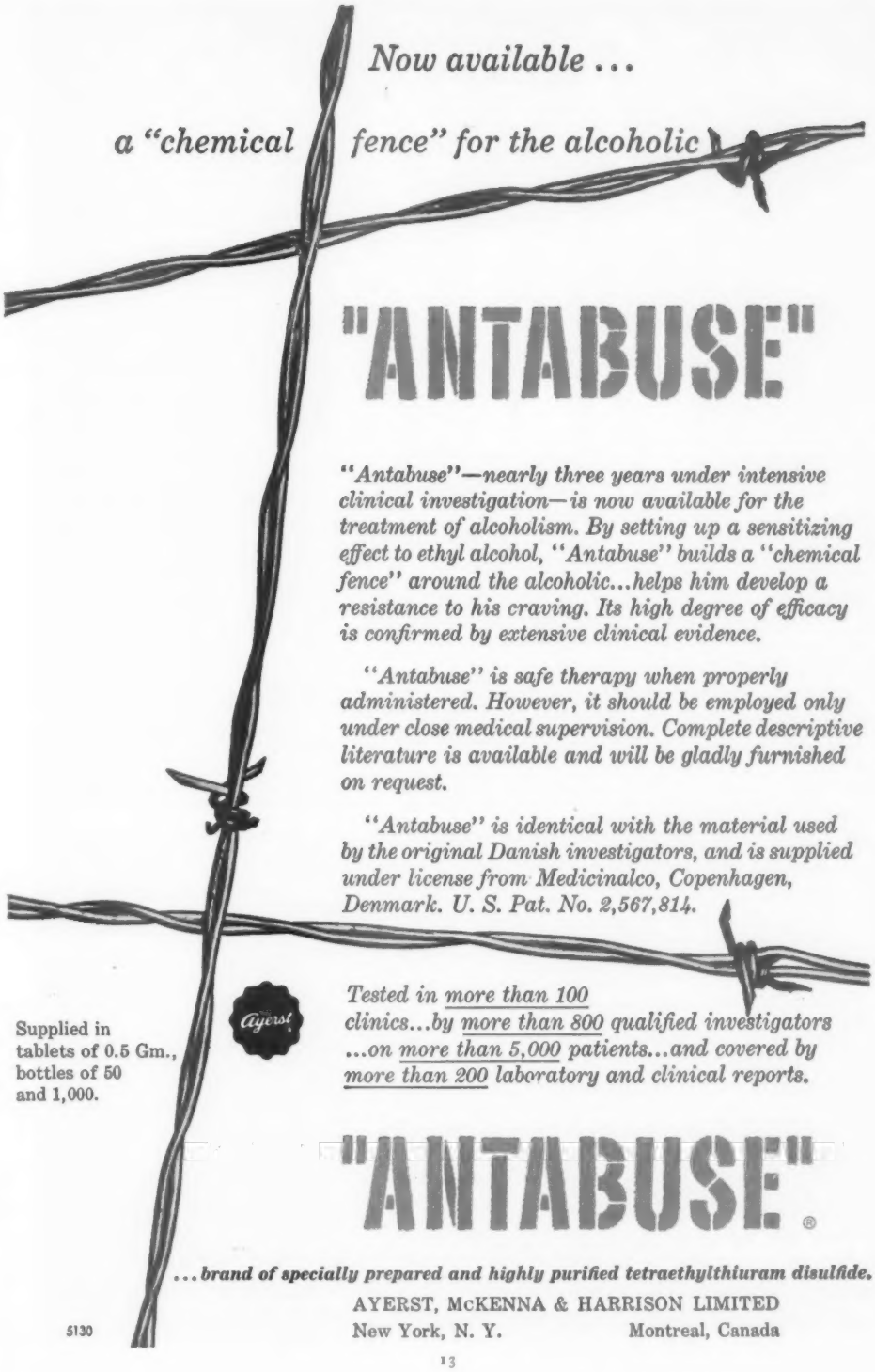
WILLIAM R. WARNER
Division of Warner-Hudnut, Inc.
New York Los Angeles St. Louis

International Correspondents

AFRICA, SOUTH	Dr. Marie Van Castricum	*Johannesburg*
ARGENTINA	Dra. Ines L. C. de Allende	*Cordoba*
AUSTRALIA	Dr. Ida Saunders	*Sydney*
AUSTRIA	Dr. Lore Antoine	*Vienna*
BELGIUM	Dr. Michotte-Ronse	*Bruxelles*
BRAZIL	Dra. Maria Paumgartten Deane	*Pará*
BURMA	Dr. Yin May	*Rangoon*
CANADA	Dr. Anna Wilson	*Ottawa*
CHILE	Dra. Maria Alvarez Arnold	*Valparaiso*
CHINA, EAST	Dr. Tsae N. Kwong	*Shanghai*
CHINA, NORTH	Dr. Marion Yang	*Peking*
CHINA, SOUTH	Dr. H. H. Huang	*Canton*
CHINA, WEST	Dr. Gladys Cunningham	*Chengtu*
CUBA	Dra. Gilda Peraza	*Habana*
CZECHOSLOVAKIA	Dr. Vlasta Kalalova di Lotti	*Praha*
DENMARK	Dr. Agnete Heise	*Copenhagen*
ENGLAND	Dr. Georgiana Bonser	*Leeds*
ENGLAND	Dr. Dorothy Anderton-Sharpe	*London*
FINLAND	Dr. Anni Seppanen	*Helsinki*
FRANCE	Dr. Gauthier-Villars	*Paris*
GERMANY	Dr. Gabriele Strecker	*Frankfurt*
GREECE	Dr. Dora Papara	*Athens*
GUATEMALA	Dra. Maria Isabel Escobar	*Guatemala*
HAITI	Dr. Yvonne G. Silvain	*Port au Prince*
HOLLAND	Dr. Henrietta A. Lohr	*Amsterdam*
HUNGARY	Dr. Vilma Sebesta	*Budapest*
INDIA, NORTH	Dr. Josephine Asirvatham	*Lucknow*
INDIA, SOUTH	Dr. Hilda Lazarus	*South Vellore*
INDONESIA	Dr. Cornelia de Ranitz	*Batavia*
IRAN	Dr. Miriam Fahimi	*Teheran*
ISRAEL	Dr. Helen Kagan	*Jerusalem*
ITALY	Dr. Mara Selvini	*Milan*
KOREA	Dr. Rhoda Kim Pak	*Chunchan*
MEXICO	Dra. Alicia Gallaga Romero	*Anahuac*
MONGOLIA	Mother Mary Franciscus, M.D.	*Ninghia*
MOROCCO	Dr. Lucia Servadio Bedarida	*Tangier*
NEW ZEALAND	Dr. S. Sinclair	*Dunedin*
NORTH IRELAND	Dr. F. Mary Erskine	*Belfast*
NORWAY	Dr. Herdis Gundersen	*Olso*
PAKISTAN	Dr. Z. Nasiruddin	*West Punjab*
PANAMA	Dra. Lidia G. Soganderes	*Santa Tomas*
PERU	Dra. Imelda Lindo de Soriano	*Lima*
PORTUGAL	Dr. Nair de Azevedo	*Lisbon*
SCOTLAND	Dr. Mary Esslemont	*Aberdeen*
SIAM	Dr. Pierra Vejjabul	*Bangkok*
SPAIN	Dr. Alicia Fernandez Calvet	*Galicia*
SWEDEN	Dr. Andrea Andreen	*Stockholm*
SWITZERLAND	Dr. Ilse Schnabel	*Zurich*
TURKEY	Dr. Perihan Cambel	*Ankara*

Now available ...

a "chemical fence" for the alcoholic



"ANTABUSE"

"Antabuse"—nearly three years under intensive clinical investigation—is now available for the treatment of alcoholism. By setting up a sensitizing effect to ethyl alcohol, "Antabuse" builds a "chemical fence" around the alcoholic...helps him develop a resistance to his craving. Its high degree of efficacy is confirmed by extensive clinical evidence.

"Antabuse" is safe therapy when properly administered. However, it should be employed only under close medical supervision. Complete descriptive literature is available and will be gladly furnished on request.

"Antabuse" is identical with the material used by the original Danish investigators, and is supplied under license from Medicinalco, Copenhagen, Denmark. U. S. Pat. No. 2,567,814.

Supplied in tablets of 0.5 Gm., bottles of 50 and 1,000.

Ayerst

Tested in more than 100 clinics...by more than 800 qualified investigators ...on more than 5,000 patients...and covered by more than 200 laboratory and clinical reports.

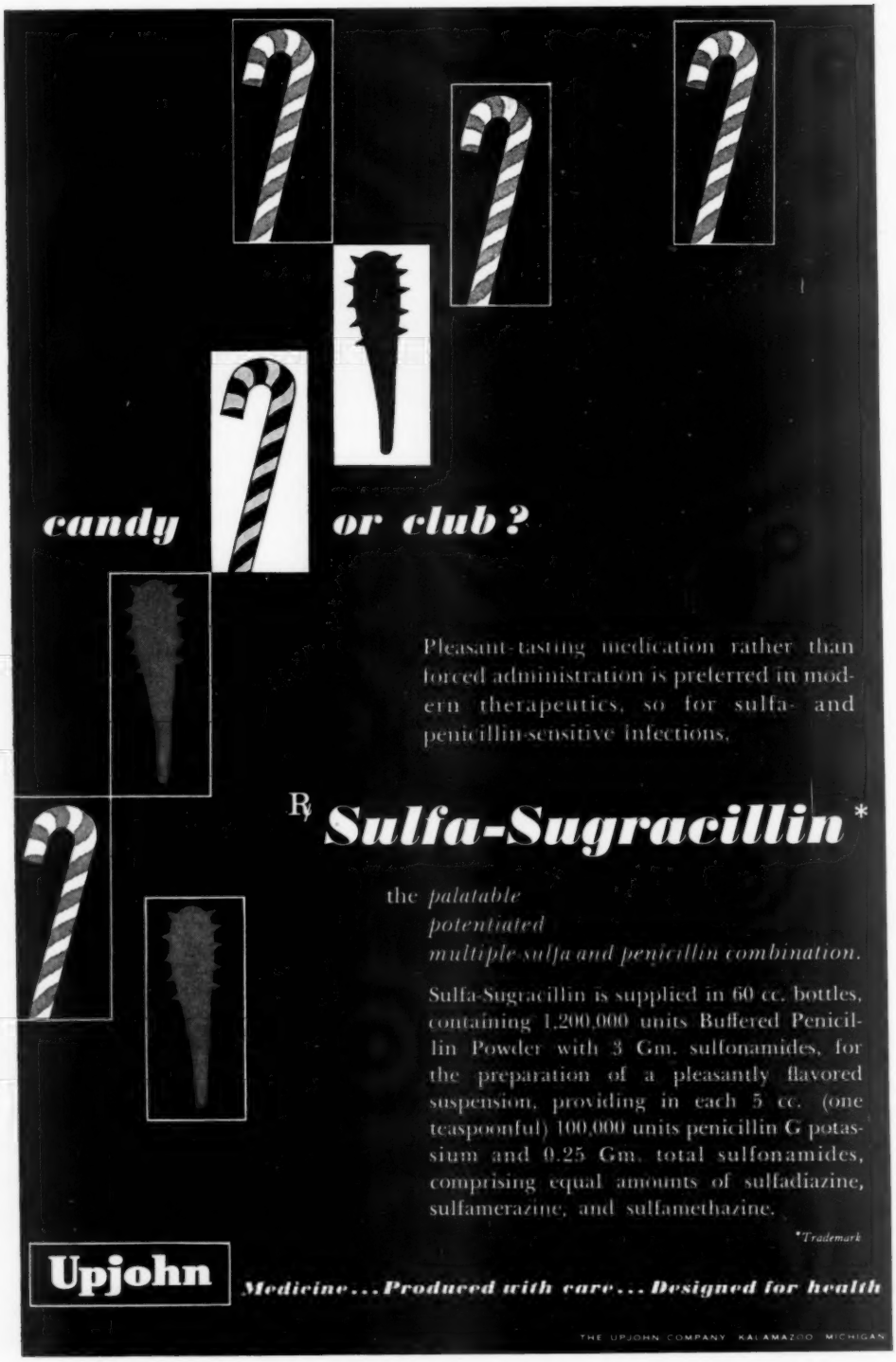
"ANTABUSE"®

...brand of specially prepared and highly purified tetraethylthiuram disulfide.

AYERST, McKENNA & HARRISON LIMITED

New York, N. Y. Montreal, Canada

5130


candy
or club?
Pleasant-tasting medication rather than forced administration is preferred in modern therapeutics, so for sulfa- and penicillin-sensitive infections.
℞ Sulfa-Sugracillin*
the palatable
potentiated
multiple-sulfa and penicillin combination.
Sulfa-Sugracillin is supplied in 60 cc. bottles, containing 1,200,000 units Buffered Penicillin Powder with 3 Gm. sulfonamides, for the preparation of a pleasantly flavored suspension, providing in each 5 cc. (one teaspoonful) 100,000 units penicillin G potassium and 0.25 Gm. total sulfonamides, comprising equal amounts of sulfadiazine, sulfamerazine, and sulfamethazine.
*Trademark
Upjohn
Medicine... Produced with care... Designed for health
THE UPJOHN COMPANY KALAMAZOO MICHIGAN

BELIEVE IN YOURSELF!

Doctor, you probably have read a great deal of cigarette advertising with all sorts of claims.

So we suggest: make this simple test...

Take a PHILIP MORRIS—and *any* other cigarette. Then,

1. Light up either one. Take a puff — don't inhale — and s-l-o-w-l-y let the smoke come through your nose.

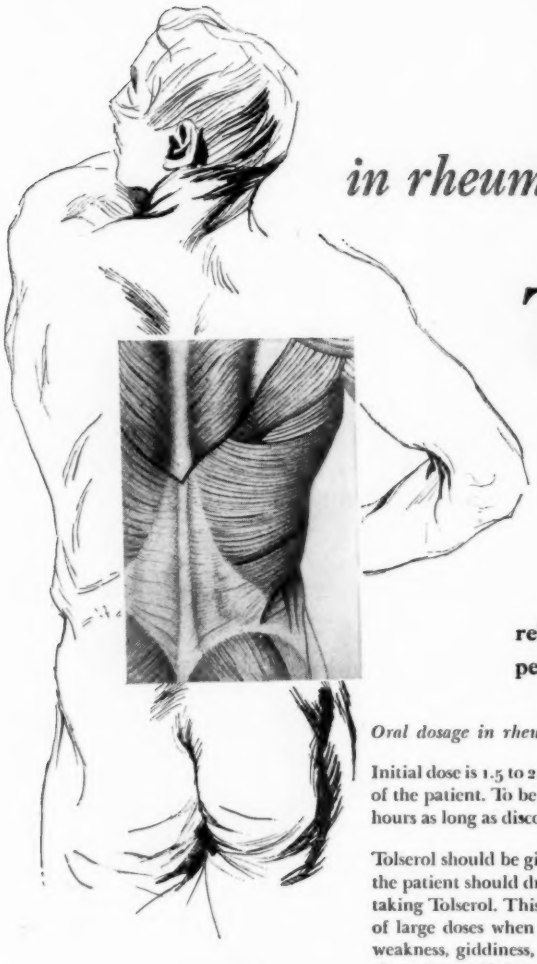
2. Now do exactly the same thing with the other cigarette.

Notice that PHILIP MORRIS is definitely less irritating, definitely milder.

Then, Doctor, BELIEVE IN YOURSELF!

PHILIP MORRIS

Philip Morris & Co. Ltd., Inc.
100 Park Avenue, New York 17, N. Y.



in rheumatic disorders . . .

Tolserol

Squibb 3-o-toloxy-1,2-propanediol

relieves stiffness and discomfort
permits increased range of motion

Oral dosage in rheumatic disorders and allied conditions:

Initial dose is 1.5 to 2.0 Gm. or more, depending on the weight of the patient. To be followed by 0.5 to 0.75 Gm. every three hours as long as discomfort continues.

Tolserol should be given after meals. If given between meals, the patient should drink ⅓ glass of milk or fruit juice before taking Tolserol. This is desirable because the administration of large doses when the stomach is empty has caused some weakness, giddiness, syncope, or gastric distress in a few patients. Some clinicians, however, prefer to give Tolserol when the stomach is empty in order to obtain a rapid effect; in such cases, the patient should be under observation.

Supplied: Tablets, 0.5 Gm. and 0.25 Gm., bottles of 100 and 1,000; Capsules, 0.25 Gm., bottles of 100 and 1,000; Elixir, 0.1 Gm. per cc., pint bottles; Intravenous Solution, 2%, 50 cc. and 100 cc. ampuls.

SQUIBB

'TOLSEROL' (REG. U. S. PAT. OFF.) IS A TRADEMARK OF E. R. SQUIBB & SONS.

Serve Coke cold...ice cold

right in the bottle

To be refreshed

Coke is at its delicious best when served ice cold. Keep it in the coldest spot in your refrigerator.

DRINK
Coca-Cola
REG. U.S. PAT. OFF.

COPYRIGHT 1951, THE COCA-COLA COMPANY

"COKE" IS A REGISTERED TRADE-MARK.

yes the answer to more effective treatment of many common infections is **NEOPENZINE**

(Penicillin with Sulfonamides, Lilly)

Has this combination of penicillin in high dosage with mixed sulfonamides a wider spectrum of antibacterial activity than any single bacteriostatic or bactericidal agent? → *yes*

Can orally administered penicillin cause fewer hypersensitive reactions than injected penicillin? → *yes*

Is penicillin as effective by the oral route as by injection if given in adequate doses? → *yes*

Is there positive assurance that the penicillin in 'Neopenzine' is protected from potency loss? → *yes*

Has the mixture of sulfonamides in 'Neopenzine' been demonstrated to be safer systemic therapy than single sulfonamides? → *yes*

Can 'Neopenzine' save time for the busy practitioner? → *yes*

Each Tablet 'Neopenzine' contains 300,000 units of penicillin—G, crystalline-potassium. Each 5 cc. (approximately one teaspoonful) of Suspension 'Neopenzine' contain 200,000 units. The latter is prepared by combining the contents of the potency-protector package. Each tablet or each 5 cc. of suspension also contain 0.167 Gm. each of sulfadiazine, sulfamerazine, and sulfamethazine.

Dosage for adults: 2 tablets four times daily.

Dosage for children: Suspension (or tablets) in proportion to weight.

Detailed information and literature on 'Neopenzine' are personally supplied by your Lilly medical service representative or may be obtained by writing to

ELI LILLY AND COMPANY • INDIANAPOLIS 6, INDIANA, U.S.A.

Journal of the
AMERICAN MEDICAL WOMEN'S ASSOCIATION

VOLUME 6 DECEMBER, 1951 NUMBER 12

ACTH and Cortisone in Ocular Disease

Grace R. Nachod, M.D.

DURING THE PAST YEAR many reports have appeared on the use of ACTH and cortisone in the treatment of various ocular lesions. It is the purpose of this articles to summarize existing data concerning the ophthalmologic use of these substances.

The mode of action of these agents is not yet known, but in some way apparently they affect the mesenchymal tissues of the body. Careful research has shown rather conclusively that they block the inflammatory reaction to toxic substances and to experimental bacterial invasion, and that they also block allergic, but *not* viral,[9, 25] reactions. Locally, cortisone also reduces vascularization and scarring of the cornea, following injury.[1]

Treatment with either ACTH or cortisone fails to alter the underlying infection. However, since many ocular inflammations are self-limited, it may readily be appreciated that any therapeutic measure which blocks the exudative phase of inflammation would be a powerful weapon. It is this reaction which determines the amount of functional impairment of the eye. For example, in a given case of uveitis, the underlying infection may eventually be controlled by antibiotics and other forms of therapy, but if, in the meantime, an inflammatory membrane has formed and occluded the pupil, the end result as far as vision is concerned is poor.

Dr. Nachod is Clinical Instructor in Ophthalmology, Woman's Medical College of Pennsylvania.

Woods and his associates have shown that this blocking action does not have any permanent effect on hypersensitive reactions of the uveal tract of the eye.[23] In rabbits the anaphylactic protein reaction, the allergic reaction to bacterial sensitivity, and the focal reaction to tuberculin can be partially or completely blocked by treatment with ACTH or cortisone. However, those reactions can again be provoked after cessation of treatment. Administration of these substances, then, must be continued throughout the course of the infection if they are to be effective in preventing the usual sequelae of ocular inflammations.

ACTH, to be effective, must be administered intramuscularly. As might be expected, it has no local action. This substance was used a great deal, in its earlier history, in the treatment of ocular diseases, but it is not used extensively at the present time, as most workers feel that there is little, if any, difference in results obtained with ACTH and cortisone, and the former produces more marked systemic side effects.

Cortisone has been given by intramuscular injection, by the oral route, and by local application. The usual preparations are used for parenteral administration. Locally, cortisone has been applied, in the form of drops or as an ointment, directly on the cornea and conjunctiva; by subconjunctival injection; and by retrobulbar injection. Leopold and his co-workers have shown that there is appreciable penetration into the ocular structures when cortisone is administered locally by any of these methods.[6] Retrobulbar injection causes a marked reaction and does not appear to offer any particular

advantage over other less traumatic methods of administration.

The usual dosage given subconjunctivally is 0.05 cc. of a solution containing 1.25 mgm. of cortisone per cc. The average interval between injections is three days. Several pharmaceutical companies now have special opthalmic cortisone solutions and ointments on the market. There are two strengths of buffered solutions available, 2.5 percent and 0.5 percent. The ointment is 1.5 percent. The frequency of local administration of cortisone depends upon severity of the disease being treated.

Advantages of the local administration of cortisone over parenteral administration are obvious. Local application causes no systemic effect and therefore can be used even when parenteral administration is definitely contraindicated. No deleterious effects on ocular tissues have been noted even after prolonged local therapy. If ACTH or cortisone is given systemically, the usual precautions must be taken and the patient followed carefully by laboratory studies and clinical observation to avoid any undesirable side effects, such as hypertension, glycosuria, water retention, and electrolyte imbalance.

As is always the case following introduction of a new tpye of therapy, ACTH and cortisone have been used in the treatment of a wide variety of ocular diseases, sometimes with little or no rationale. Starting from the anterior structures of the eye and proceeding posteriorly, we shall consider those conditions in which either has been used under the following anatomical groups:

Lids. Cortisone has been used locally in the treatment of allergic conditions of the lids and in bacterial blepharitis. The results have been good in the former groups and variable in the latter.

Conjunctiva. Although cortisone is usually effective in various types of allergy, the treatment of vernal conjunctivitis by this agent has met with varying success. Most workers feel that subjectively the results are good, but that little objective improvement can be seen. Symptoms recur when treatment is stopped. Other types of allergic conjunctivitis have responded well, as have some cases of chronic conjunctivitis. Antibiotics were also used in some of the latter cases. No beneficial results have been noted in the treatment of ocular pemphigus.

Sclera. Episcleritis and sclerokeratitis have responded promptly to local treatment with cortisone and to systemic therapy.

Cornea. Deep and superficial non-specific keratitis, acne rosacea keratitis, phlyctenular keratoconjunctivitis, tuberculous keratoconjunctivitis, and recurrent marginal ulcers have responded well to local treatment with cortisone. In dendritic keratitis, the results have varied somewhat. Most workers agree that subjective improvement is marked, but that the dendritic ulcers do not heal any more rapidly than with any other treatment. Reports on its use in the treatment of luetic interstitial keratitis have varied. Some workers have reported good results, but this has by no means been universal. Those who have claimed some success feel that local administration is as effective, if not more effective, than systemic, and that treatment must be given early in the disease. Results obtained in the treatment of corneal dystrophies have been universally poor, as would be expected. The use of cortisone in preventing clouding and vascularization of corneal grafts has met with uneven results. It must be remembered that cortisone delays wound healings and, therefore, cannot be used too early in these cases.[6, 9]

Anterior Uveal Tract. Dramatic success has been achieved in the large majority of cases of iritis and iridocyclitis treated with cortisone. The preferred method of administration is local, either by drops, ointment, or subconjunctival injection, but it has been necessary in some cases to give it systemically also. Acute inflammations respond to this type of therapy better than do chronic cases. It has been found that, in cases which required systemic treatment, recurrences could almost always be controlled by local administration of cortisone. One of the outstanding achievements of this hormone therapy has been in controlling postoperative uveitis. Until the present time, this type of reaction was very difficult to control and the end results of the uveitis often negated good surgical results. For this purpose it seems best to administer cortisone systemically.

Posterior Uveal Tract. The response of choroiditis to cortisone has not been decisive. As this is typically a self-limited disease, it is difficult to evaluate the results obtained, but most workers feel that cortisone, when given systemically, is beneficial in some cases. Cortisone has been used in Coate's disease, Eale's disease, and choroideremia without benefit.

Retina. Cortisone and ACTH have been used without beneficial effect in disease of the retina, with possibly one notable exception, namely, retrolental fibroplasia. Reese and Blodi reported good results in a series of 14 premature infants who were given 20 to 25 mgm. of ACTH daily for retrolental fibroplasia.[11] They started treatments when peripheral retinal edema and detachment were first noted, and stated that the process was arrested or that it regressed in every patient treated with ACTH. Unfortunately, other workers have been unable to duplicate these results; but certainly further study is

indicated. Systemic administration of ACTH or cortisone has been used without benefit in macular degenerations, retinitis pigmentosa, and diabetic retinopathy.

Optic Nerve. These agents have been given systemically for the treatment of optic atrophy and optic neuritis. The results in cases of the former condition have been universally poor. Some good results have been obtained in cases of optic neuritis. It is not surprising that results have varied, considering the numerous etiologic agents that might be involved.

Malignant Exophthalmos. Systemic administration of ACTH has caused no regression of the exophthalmos in the few cases in which it has been used.

Glaucoma. This form of treatment does not benefit primary glaucoma. The response obtained in cases of secondary glaucoma has been puzzling. In some instances the tension has fallen to normal levels following administration of cortisone, while in other cases secondary glaucoma has actually developed during cortisone treatment of anterior uveitis. No satisfactory explanation has so far been advanced for this paradox.

Sympathetic Ophthalmia. Good results have been obtained in this condition with cortisone systemically administered. Until the advent of this form of therapy, sympathetic ophthalmia had been notoriously difficult to control.

Summary

Cortisone and ACTH have been used quite successfully in the treatment of allergic conditions of the lids and external eye, and in inflammations of the cornea, sclera, and uveal tracts.

Variable reactions have been reported in secondary glaucoma, optic neuritis, interstitial keratitis, retrolental fibroplasia, and early clouding of corneal grafts.

As yet no clear cut therapeutic effect has been noted in Coate's disease, Eale's disease, diabetic retinopathy, malignant exophthalmos, or primary glaucoma.

These substances have no effect on degenerative lesions.

Topical administration is preferred in affections of the anterior segment, that is, from the lids to the ciliary body. In conditions affecting the structures posterior to these, cortisone or ACTH should be administered systemically.

It must be remembered that these substances do not alter the underlying infection, and that every effort should be made to discover the etiology of the infection.

References

[1]Blake, E. M., Fasnella, R. M., and Wong, R. M., ACTH in glaucoma, Am. J. Ophth., **33:** 1231-1235, Aug. '50.

[2]Gordon, D. M., and McClean, J. M., ACTH in ophthalmologic conditions, J.A.M.A., **142:** 1271-1274, Apr. 22, '50.

[3]Henderson, J. W., and Hollenhorst, R. W., Clinical observations on the use of cortisone in ophthalmic diseases, Tr. Am. Acad. Ophth. & Oto., 543-564, May-June, '51.

[4]Jones, I. S., and Meyer, W., Inhibition of vascularization of the rabbit cornea by local application of cortisone, Proc. Soc. Exp. Biol. & Med., **74:** 102-106, May '50.

[5]Koff, R., Rome, S., Kasper, R., Commons, R. R., Button, R., and Starr, P., Subconjunctival injection of cortisone in iritis, J.A.M.A., **144:** 1259-60, Dec. 9, '50.

[6]Leopold, I. H., Purnell, J. E., Cannon, E. J., Steinmetz, C. G., and McDonald, P. R., Local and systemic cortisone in ocular disease, Am. J. Ophth., **34:** 361-371, Mar. '51.

[7]McClean, J. M., Gordon, D. M., and Koteen, H., Clinical experiences with ACTH and cortisone in ocular diseases, Tr. Am. Acad. Ophthl. & Oto., 565-575, May-June, '51.

[8]Mann, W. A., and Markson, D. E., A case of recurrent iritis and episcleritis on a rheumatic basis treated with ACTH, Am. J. Ophth., **33:** 459-461, Mar., '50. (pt. 1).

[9]Newell, F. W., and Dixon, J. M., Cortisone and union of corneal grafts, Am. J. Ophth., **34:** 977-981, June '51.

[10]Olsen, J. A., Steffensen, E. H., Margulis, R. R., Smith, R. W., and Whitney, E. L., The effect of ACTH on certain inflammatory diseases of the eye; a preliminary report, J.A.M.A., **142:** 1276-1278, Apr. 22, '50.

[11]Reese, A. B., and Blodi, F. E., Retrolental fibroplasia, Am. J. Ophth., **34:** 1-24, Jan. '51.

[12]Steffensen, E. H., Olsen, J. A., Margulis, R. R., Smith, R. W., and Whitney, E. L., The experimental use of cortisone in inflammatory eye disease, Am. J. Ophth., **33:** 1033-1044, July '50.

[13]Steffensen, E. H., Wishbow, A. J., Nagle, F. O., Smith, R. W., and Whitney, E. L., Topical cortisone in the treatment of anterior-segment eye disease, Am. J. Ophth., **34:** 345-356, Mar. '51.

[14]Thygeson, P., and Fritz, M. H., Cortisone in the treatment of phlyctenular keratoconjunctivitis, Am. J. Ophth., **34:** 357-360, Mar. '51.

[15]Woods, A. C., ACTH and cortisone in ocular disease, Am. J. Ophth., **33:** 1325-1348, Sept., '50.

[16]Woods, A. C., The present status of ACTH and cortisone in clinical ophthalmology, Am. J. Ophth., **34:** 945-960, June '51.

The Cancer Problem

CORRELATION OF INVESTIGATIONAL DATA

Machteld E. Sano, M.D.

THE COMPILATION of even recent data on the cancer problem with its correlation and integration into already established facts has become an insuperable task. The apparent irrelation of trends in cancer research and the great number of achievements in the field without perceptible increase in patient survival are bewildering to patient and physician alike. Most comprehensive texts are necessarily long. How can they be otherwise if they are to cover the subject? For the above reasons it is incredibly difficult to give the medical student an understanding of the complexity of the problem and to explain the ever lengthening list of ephemeral cancer tests and cures. I hope, nevertheless, as the reader follows the discussion, correlating it with the chart, he will see that, gradually, the fragments of the gigantic cancer puzzle are falling into place.

Each minute function in the human body is the result of a system in equilibrium. Each system is dependent on its interaction with another system and both may be under the influence of a still more complex system. This balance, this action and reaction is a proved premise inseparable from any cancer research study. We must have it continually in mind.

(1)* Whether a normal cell is young and active, in the adult resting stage, or aging, there is always a controlled balance between the components of cytoplasm and nucleus. The normality of this relationship is routinely established by microscopy. The cytologist and pathologist come to this conclusion by long and careful study. The cytologist observes the isolated cells, the pathologist the pattern they assume in the fixed tissue as well as their individual cytoplasmic and nuclear characteristics. But the cells thus studied are dead and static. Are these apparently normal cells really normal? Have some not undergone a chemical transformation imperceptible by our usual methods?

Dr. Sano is Associate Professor of Pathology, Woman's Medical College.

(2) Tissue culture, the growth of tissue fragments in vitro, becomes kinetic pathology, pathology in motion, when applied to the study of tissues suspected of disease. It has demonstrated that cells which appeared normal under the microscope grew abnormally in culture; and later clinical evidence of disease has proved some of these observations to be correct. Tissue culture is an invaluable adjunct to pathology and to cancer research.

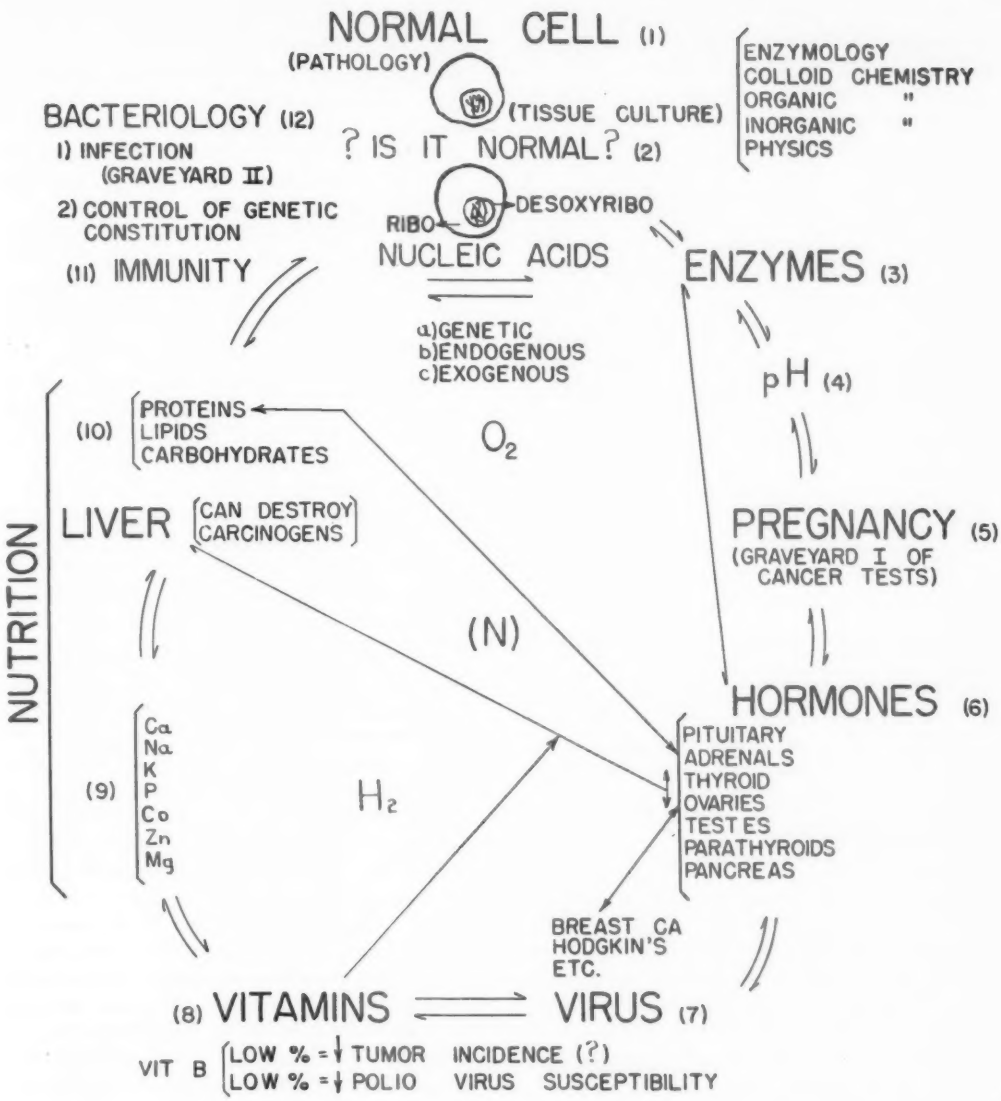
What determines the characteristic behavior of a cell?

(a) Cytoplasm and nucleus have inherent characteristics of which their respective genes are the carriers. These, within themselves, may possess factor "X," the cause of cancer. Hereditary factors indubitably influence the formation of certain tumors, as has been demonstrated with inbred mice. The cause is genetic.

(b) On the other hand, Avery and his associates have isolated a substance (a desoxyribonucleic acid) from certain pneumococci, which induces the transformation of an attenuated non-encapsulated pneumococcus into a fully capsulated and virulent type. If the genetic constitution of bacteria can be altered *at will* by a naturally occurring substance, it is not unreasonable to assume a hypothetical nucleic acid or substance liberated during the course of a non-cancerous disease, condition, or injury, as the malignant transformer, or carcinogen. The determining factor is endogenous.

(c) Innumerable substances have been proved to cause cancer experimentally. These act in different concentrations according to their potency, and their effect is manifested after a variable latent period. The cell balance is disturbed, as shown by abnormal multiplication and morphologic changes. Exactly how this is accomplished is still a mystery but certain pertinent observations now should be considered.

*Keys to the figures at the beginning of the twelve paragraphs which follow, will be found in the chart, page 457.



(N) = NEURAL INFLUENCE

NUMBERS IN PARENTHESES REFER TO CORRESPONDING PARAGRAPHS IN ARTICLE.

M. E. SANO

(3) The concentrations of ribonucleic acid and of desoxyribonucleic acid in cytoplasm and nucleus, respectively, vary according to cellular activity, but are always concurrent. If this quantitative relationship changes, as it does in malignancy, the cell becomes abnormal in both behavior and appearance. This relationship depends in part on enzyme systems. Therefore, any condition which disturbs the enzyme system will reflect on the chemical composition of the cell. If significant, it may permanently disrupt the equilibrium between cyotplasm and nucleus so that the sequence of nuclear-cytoplasm division with formation of two well balanced daughter cells is disrupted. The nucleus may continue to divide, but the cytoplasm does not follow suit. This is but one of the variations which may occur, but it is one which is beautifully illustrated in moving pictures of tissue cultures of tumors.

The study of enzyme requirements of normal tissue is a specialty in itself. The role of enzymes in the genesis of cancer is an extremely intricate one. Much progress has been made, however; and once elusive enzymes, such as those of the nucleic acids, are today available in crystalline form.

(4) The optimum activity of enzymes depends to a great extent on the pH of their environment. While the pH range within which they can function is relatively narrow, it is still wider than the variations seen in the pH of human blood or tissues in health or disease. Unfortunately, the measurement of pH in body fluids and tissues is an extremely difficult one, because of the rapidity with which it changes, once the fluids or tissues are removed from their milieu. We are still inadequately informed as to how much the pH of a nuclear-cytoplasmic enzyme system may vary before it induces cellular changes demonstrable by usual methods or by tissue culture. The plasma of cancer patients was considered by some to be on the alkaline side. (Slosse-Reding). This work was refuted, yet, after some twenty years, their results are still the same; their method is more precise, more laborious. These authors found a similar tendency to alkalinity during pregnancy. Further meticulous work by other investigators is indicated.

(5) Pregnancy is a physiologic state which in many ways stimulates malignancy. It has been graveyard number one of cancer tests, inflammation and bone repair being next on the list. Up to the present time there is only one test for cancer (Menkés) which does not give false positive during pregnancy. The growth-promoting effect of pregnancy on existing tumors is a well known phenomenon, though the exact mechanism has not been elucidated. If they exist, pH variations may be of some importance. Increased hormone production, on the other hand, has received much attention.

(6) Every year new hormones are discovered. Their relation to tumor formation has become a specialty within a specialty. Hormones stimulate the production of other hormones in a distant organ, and the pituitary appears to be the master controlling them all. However, the activity of the pituitary in turn is influenced by the quantity of subordinate hormone produced elsewhere. Unless a perfect balance is kept between them, excessive amounts of one can influence tumor growth. But hormones also affect enzyme concentration. Let us consider one example to clarify this intriguing relationship. Ovariectomy decreases the concentration of the enzyme beta—glucuronidase in the uterine, mammary, and vaginal tissues. If estrogen is given, the enzyme concentration increases in these tissues; in pregnancy the enzyme concentration increases in the serum. In certain mice, estrogen stimulation increase the beta—glucuronidase in the liver but not in the kidney. On the other hand, testosterone increases beta—glucuronidase in the kidney but not in the liver. Tissue specificity of the hormone-enzyme relationship is therefore different for the same enzyme with female and male hormone. This knowledge has opened another approach from which to attack the cancer citadel.

(7) Hormone-enzyme interaction and tissue specificity lead us to deliberate on one of these tissues, namely, the breast. A new entity enters the problem, that is, the controversial virus as a cause of cancer. The discovery of the milk factor in mice by Bittner and its identification later as a nucleoprotein and virus has been one of the most concrete and gratifying discoveries of recent years. Its relation to the development of breast cancer in mice is clearly defined; but breast cancer in mice may occur in the absence of the virus. This is not so contradictory or confusing as one might at first expect. Certain bacteria can cause transplantable tumors in plants, yet the transplanted tumors are bacteriologically sterile. The application of methylcholanthrene to the skin will in time cause malignant change, yet the carcinogen will no longer be present. Once the perfect balance of cytoplasm-nucleus, cell, and tissue pattern has been irreversibly altered and the chain reaction of abnormal mitosis started, the instigator can disappear; but the chain reaction may go on. Though this has not been proved to be the case in breast cancer of mice without the milk factor, it should by no means deter us from further investigation along the virus-cancer line.

(8) Chemically, viruses are closely related to nuclear and cytoplasmic genes. Understanding of their complex composition is in an early stage. However, something is known of the nutrient factor in another non-cancer-inducing virus, that of poliomyelitis. The susceptibility of mice to the Lansing strain is greatly diminished on a vitamin B deficient diet. In starvation, tumor occurrence is low, but so is pregnancy, and so is the production of hormones. Involved as this may seem, one is impressed by certain similarities and parallelisms among these observations.

(9) Different from vitamins, but a component of our food, calcium is important in the development of tumor cell behavior.

Variation from the normal pattern of tissue cells is one criterion used by the pathologist in the diagnosis of malignancy. When a carcinogen, methylcholanthrene, is applied to the skin, calcium concentration is rapidly reduced, as is the cohesiveness of the cells. The changing values for both have been accurately determined (Cowdry and others). Decrease in cohesiveness and subsequent change in the relative position of the cells result in disorganized cell patterns. Eventually the cells may migrate to adjacent tissues or to the blood stream and lymphatics, whence they are carried to other sites. The calcium binding mechanism is altered when acid-base equilibrium is disturbed, as has been observed in atheromatosis, a common finding in the older age group, in which cancer occurrence is also higher. This study of calcium concentration and cell cohesiveness, although seemingly academic, is important in the study of the whole cancer problem.

(10) While we are still far removed from prescribing rules and diets in order to prevent cancer, visions of such a time are not mere phantasies. Anabolic and catabolic processes are similar in persons with and without cancer. The balance between the two processes is more or less stable; but in some of us it is more immutable than in others. Accordingly, under the influence of disease or an excess of cortical hormones, which inhibit protein synthesis, the same disease or the same quantity of hormone may shift the balance more in one individual, less in another. At present, no means of evaluating the stability of liver function are available. Scientists are faced with much arduous labor before they will be able to suggest for one a ketogenic diet, for another an alkalizing drug, in order to produce a tissue system resistant to cancer.

(11) Many have attempted to produce immunity to malignancy by methods somewhat similar to those used in bacteriology. The comparative resistance of some organs to cancer suggests this approach to most investigators. Yet Ewing predicted a long time ago that resistance was probably on an anatomic, rather than a genetic, basis. More and more experiments are fulfilling the prophecy. That a certain immunity can be produced in animals by previous inoculation of tumors has been shown. But no adequate immunity has been produced which might be applicable to man.

(12) One cannot divorce either immunology or bacteriology from the study of cancer. The type of specific transforming substance spoken of in 2b, the interplay of enzymes in infection, the presence of nucleo-proteins in bacteria, the use of bile salts in the separation of bacterial components, all have implications which are of importance in the consideration of cancer. It would take volumes to discuss them.

No mention has been made of oxygen, hydrogen, and the nervous system. These are placed in the center of the chart, since they are inseparable from any system.

Discussion

To postulate that the cause of cancer is genetic or endogenous is quite logical, but its exogenous origin is just as likely, directly or indirectly. To consider cancer as the result of a disturbance in one or several enzyme systems might seem to be an acceptable hypothesis. Or one of the hormones, directly, as a hormone, or indirectly, as incorporated in an enzyme system, might be selected in a theory of the cause of cancer. Viruses are known to cause certain malignant tumors in animals, a virus is known to play an important role in mammary cancer of mice and possibly also in man. Until the cause or causes in man are found, we must not condemn experiments or hypotheses which fit into the scheme of things, but which we deem of little importance.

A glance at the chart will suggest varied ways of developing a cancer test or a cancer cure. With pencil and paper and a little chemical knowledge some fifty different projects for tests might be conceived. Many have been tried. Most of them fail to meet expectations because other conditions, such as pregnancy and bone repair or inflammatory disease, produce disturbances similar to cancer. False positives in pregnancy and bone repair are permissible and can be screened, but not in the case of infection. Articles have been rejected because in them results were submitted which included, besides normal tissue, inflammatory tissues, as controls in cancer experiments. Yet anyone familiar with clinical

cancer knows how frequently the differential diagnosis between cancer and infection cannot be made.

Given several months to study each phase with an expert on the subject, a master mind with a good background of chemistry, physics, and medicine, plus mental stamina, might find the solution. Or, if one big enough to remain anonymous were to receive in trust the ideas of others, he might possibly guide them to the solution. A fundamental knowledge of chemistry, a profound understanding of static and kinetic pathology, great patience, and unbounded enthusiasm are the required qualities of the successful investigator.

As one juggles with chemical formulas it is possible to construct, on paper, a chemical with an inhibiting influence on mitosis, a stabilizing effect on hormone-enzyme specificity, and antibiotic properties. A few years ago it would have been inconceivable to sit down and speculate on cancer except in the vaguest terms. That it is not considered so today is an indication that in terms of years and money spent we are not too far away from the goal.

References

[1]Sano, M. E., and Smith, L. W., Tissue culture as a diagnostic aid in the identification of atypical tumors, Arch. Path., 30: 504-508, Aug., '40.

[2]Sano, M. E., and Bello, C. T., The Diagnostic value of differentiating betwen morphologically identical cells by tissue culture, Am. J. Surg., 81: 515-520, May '51.

[3]Murray, M. R., and Stout, A. P., A sympathetic ganglioneuroma cultivated in vitro, Cancer, 1: 242-247, July '48.

[4]Avery, O. T., MacLeod, C. M., and McCarty, M., Studies on chemical nature of substance inducing transformation of pneumococcal types; induction of transformation by desoxyribonucleic acid fraction isolated from pneumococcus type III, J.Exper.Med., 79: 137-158, Feb. '44.

[5]Reding, René, Discussion et choix de la méthode de mesure de l'ion calcium, Le Terrian cancéreux et cancèrisable, Paris, Masson et C[ie], Ed., 1932.

[6]Menkès, George, Une nouvelle méthode de diagnostic du cancer, Medecine et Hygiene, (Genève), Nov. 15, '49.

[7]Barnum, C. P., and Huseby, R. A., The chemical and physical characteristics of preparations containing the milk agent virus: a review., Cancer Res., 10: 523-529, Sept. '50.

[8]Huseby, R. A., Barnum, C. P., and Bitner, J. J., Titration of the milk agent virus in milk and lactating mammary gland cells, Cancer Res., 10: 516-520, Aug. '50.

[9]Cowdry, E. V., Epidermal carcinogenesis, J.A.M.A., 135: 408-411, Oct. 18, '50.

Dysfunctional Uterine Bleeding

Sarah E. Sykes, M.D.

DYSFUNCTIONAL UTERINE BLEEDING, functional uterine bleeding, and metropathia hemorrhagica are all terms used for a gynecologic syndrome which has been defined by Greenblatt[1] as "abnormal and excessive uterine bleeding which occurs because of physiological disturbances and not pathologic processes." In other words, it is chiefly endocrinopathic bleeding, not bleeding which is the result of tumor or inflammation, although certain writers allow endometrial polyp to be thus classified, feeling that it is an example of hyperestrogenation.

This type of bleeding is seen chiefly at the extremes of the menstrual life. Novak[2] estimated, in reviewing his series, that 50 percent of dysfunctional bleeding occurred in menopausal women, 10 percent in pubertal girls, and the remainder in women in the childbearing period. These age groups will be used in the following discussion of the etiology, pathology, and treatment of this syndrome, as well as in presenting statistics over a ten-year period for the ward service of the Woman's Medical College Hospital.

Schroeder[3] first postulated the theory that such bleeding arose from persistent follicles resulting in endometrial hyperplasia. A persistently high estrogen level caused inhibition of pituitary gonadotrophin which led to a fall in circulating estrogen and withdrawal bleeding. Te Linde's series, in which 63 percent of the endometrial curettings obtained from women with dysfunctional uterine bleeding showed hyperplasia, bears out this theory as an important one, but there are also other explanations.

Dr. Sykes is Clinical Assistant in Gynecology, Woman's Medical College.

With Markee's work on endometrial transplants, much was learned about the mechanism of normal menstrual bleeding, which sheds light on the mechanism of dysfunctional bleeding. Allen had demonstrated that removal of both ovaries from a mature Rhesus monkey led to menstrual bleeding, and that the process could be duplicated by the withdrawal of estrogen artificially administered to these castrates. Markee demonstrated in endometrial transplants that the withdrawal of either estrogen or progesterone led to menstrual bleeding. Further information was obtained by Engle[3] in castrates. He showed that estrogen withdrawal bleeding could be counteracted by the administration of progesterone, but that bleeding will occur after the withdrawal of progesterone. This forms the basis of the so called medical curettage. Bartelmez, whose important observations concerning the pathological picture seen with one form of dysfunctional bleeding will be discussed later, also contributed to the etiology of this syndrome the theory that it is the hormonal effect on the vessels of the myometrium which may cause prolonged bleeding rather than the direct action of the circulating hormone on the endometrium. As an example, he points out that withdrawal bleeding may be seen in castrates with an atrophic endometrium. He believes that this may be explained by the failure of the proximal arterioles to contract after the initial extravasation of blood, because the vessels are not responding properly or uniformly to the hormone.

Up to this point, only one of the pathological pictures seen in dysfunctional uterine bleeding has been mentioned, that of hyperplasia. Hamblen,[4] however, in his 1946 edition of *Endocrinology of Woman* divides dysfunctional bleeding into two main groups, estrongenic and progestational. Estrogenic bleeding may occur from a normal estrogenic endometrium which has persisted beyond its time in the cycle because of poor corpus luteum, or from an endometrium showing hypo-ovarian action. The second main group, progestational endometrium, may give rise to dysfunctional bleeding from an immature progestational endometrium, a normal progestational endometrium, or one with progestational changes exaggerated to the point of appearing decidua-like. Between these two groups lies a third, that of mixed endometrium, first discussed by Bartelmez. Here in different portions of the same endometrium can be seen varying stages of development. Brewer and Jones,[5] by correlating endometrial currettings and laparotomy sections of ovaries from patients at known intervals in their cycles, showed that the picture of irregular maturation and shedding occurred with prolonged corpora lutei, while with normal corpora lutei these areas of irregular maturation were isolated phenomena, which they postulated to be due to a local refractory area. Thus, prolonged bleeding occurred from a single sinus while the rest of the endometrium was in the appropriate stage.

Treatment of dysfunctional bleeding is dependent upon a number of factors, but principally upon etiology and age of the patient. In the pubertal girl, where one is most often faced with an exaggeration of the normal physiology of anovulatory cycles with prolonged unopposed estrogen levels resulting in hyperplasia, or with irregular maturation because of poor corpus luteum development, hormone therapy without preliminary curettage is permissible and usually effective. In the face of a normal or lowered metabolic rate, thyroid therapy may be all that is necessary for cyclic correction, but one must be mindful of the danger of resultant sterility if too much temporizing is done. Curettage may become a necessity not only for diagnosis but as a hemostatic measure. If the hemoglobin is not too low, however, it may be possible to secure medical currettage by the use of cyclic estrogen and progesterone, as outlined by Hamblen.[4] This is done in five stages, hemostatic, cycle development, and pituitary regulation. It is interesting to note that in the last edition of the work of Meigs and Sturgis,[6] Hamblen has made two changes in therapeutic agents from those outlined in his own text. He no longer advocates the use of equine and chorionic gonadotrophins except as a last resort, because he feels that their allergenic danger outweighs their value. He also advocates the use of estrone sulfate instead of synthetic stilbesterol, because it has less toxic effects, does not stimulate the pituitary to luteinization, and participates in steroid metabolism. A third method of controlling dysfunctional bleeding in the hyperestrin bleeding of the pubertal girl is the use of testosterone, either in a hemostatic dose or in smaller doses, for ten days before each period. If, however, upon currettage the diagnosis is found to be irregular maturation, and currettage is not curative, then the use of progesterone for ten days before each period is recommended to strengthen the corpus luteum effect.

At the opposite end of the menstrual life, curettage is imperative to establish diagnosis and to rule out malignancy. In many cases, one or more curettages are not only diagnostic, but curative. In Mack's[7] series 83 percent of patients over 35 years of age were cured by one or more curettages, although only 39 percent of the cases under 35 were

thus cured. Te Linde and Jones had success with only 50 per cent of their patients over 35, with curettage alone, but when the refractory cases were treated with one to three cycles of premenstrual progesterone all 48 patients responded. Since, except in rare cases, it is not necessary nor feasible to preserve the childbearing capabilities in this age group, where the ovary is becoming refractory to stimulation, cyclic therapy is little used. If the bleeding does not respond to curettage, and is not so severe as to require hysterectomy, with or without conservation of the ovaries, the present trend is to control the excessive bleeding with testosterone or progesterone given premenstrually. Another method of control in this age group is the use of radium after a diagnostic curettage. It has been recognized that there are disadvantages in this method, shared with the less frequently used x-ray castration, in that there may be annoying urinary sequelae and occasionally a recurrence of bleeding either because of insufficient dosage or because of actual vessel necrosis. Recently, Randall[8] and Corscaden and Gusberg[9] have pointed out an additional hazard, in that a significant number of hyperplastic endometria have been found, upon subsequent curettage, to have passed over into endometrial carcinoma. If radium has been used, not only has the dosage been inadequate for treatment of malignancy, but the pathological picture has been confused by introduction of radiation changes.

In between these two extremes of the menstrual life lies the group of women in the childbearing age, in which treatment is apt to be the most troublesome. Curettage is often ineffective, and multiple hospital procedures for women who are active in the home or in business are economically impractical. On the other hand, it is often imperative to maintain the childbearing function as well as to maintain women in sufficient health to attend to their duties. It is in this group that, after curettage to establish the diagnosis, the use of endocrine preparations is a particular boon. Cyclic therapy with estrogen and progesterone is used to re-establish regular menstrual bleeding in the hyperestrin endometrium, or decreasing doses of estrogen alone may be effective. Premenstrually administered testosterone may also be used in these cases, without fear of virilizing effects, so long as the total dosage does not exceed 250-300 mg. per month. Greenblatt[1] has combined all three hormones, and claims 95 percent success with an injection consisting of 10,000 units of estradiol benzoate and 25 mg. of progesterone daily for three to five days. Hemostasis is said to occur in 6 to 24 hours, following which the dosage may be halved on the succeeding days. A normal period ensues in one or two days and the patient is then placed on oral progesterone for five days premenstrually. If spotting recurs the author then recommends cyclic therapy with oral estrogen and progesterone for one to three cycles. When the endometrium is found to be in the persistent estrin phase, or shows irregular maturation, premenstrual progesterone is usually effective following curettage. Only when all else fails and the blood loss is becoming inimical to health is hysterectomy with ovarian conservation practiced.

In conclusion, a study on dysfunctional uterine bleeding from the ward service of Woman's Medical College Hospital for the 10-year period between 1940 and 1950 is presented. There were 100 patients with the diagnosis of dysfunctional bleeding discharged one or more times from the service. Forty-five of these were included in this study, the remainder being eliminated because of incorrect diagnosis on review of the chart or inadequate follow-up. All the patients included have had a minimum of one year's follow-up in the clinic, with exception of two in 1950, who, at the present writing, have been discharged for 11 months (See table on page 463).

Comment

It might appear that we have not had much success with endocrine therapy. However, on closer examination of our statistics, it will be seen that several factors have weighted our figures. In the first place the majority of our patients are in the menopausal group. But perhaps the two greatest factors are the economic level of the ward patients and the fact that the larger number of them were treated before the widespread use of hormone therapy. All three of these factors, age, economic status, and the era of treatment, predispose to the greater use of radium therapy. In the menopausal group, cyclic endocrine therapy is not indicated. Moreover, patients from a ward service cannot afford the time for repeated hospitalizations for curettement, although endocrine therapy is now becoming less expensive. A survey of private patients in the years from 1945 to 1950 points to an increasing use of hormone therapy. Even in our small series, one of the disadvantages of radium therapy may be seen. Of 15 patients in whom radium was used, subsequent hysterectomy was necessary in two because of radium necrosis causing bleeding.

It is also of interest to note that in the pubertal group, two patients, originally controlled on curettage and hormone therapy, because of continued cyclic irregularities, eventually underwent laparotomy for oophorectomy. One of these girls, after a right oophorectomy and wedge resection of the left

STATISTICS FROM THE GYNECOLOGIC WARD SERVICE
Woman's Medical College Hospital, 1940-1950

AGE GROUP	DIAGNOSIS	NUMBER OF PATIENTS			TREATMENT							
		1940-45	1946-50	TOTAL	1940-45				1946-50			
					D&C	Radium	Hysterectomy	Endocrine	D&C	Radium	Hysterectomy	Endocrine
Pubertal 13-20	Persistent estrin phase	2	1		2A			2B	1A			1B
	Hyperplasia		1	4					1AB 0			
Childbearing 21-40	Persistent estrin phase	9	1		9A		2B	3B	1			
	Hyperplasia	1	1	15	1A			1B	1AB			
	Irregular maturation	1	2		1				2			
Menopausal 41-55	Persistent estrin phase	12	1	24	10A 1X	5A 3B	2B 1A		1A	1B X		
	Hyperplasia	4	0		3A	1A 1B	1A 2B					
	Irregular maturation	5	1		4A	2B	1		1A	1A		
	Late estrin phase	1			1A		1B					
Postmenopausal 55 and above	Uterine apoplexy	1	1	2								
Totals		36	9	45								

A, Primary therapy; B, subsequent therapy; O, later oophorectomy; X, x-ray follow-up

ovary for multiple follicular cysts associated with hyperplastic endometrium, developed regular cycles and is now six months pregnant.

Conclusions

1. Treatment of dysfunctional uterine bleeding is based on the age of the patient and the type of pathology encountered in the endometrium.

2. In our series, it appears that the persistent estrin phase endometrium was the most common cause of dysfunctional uterine bleeding in all age groups.

3. Irregular maturation rather than hyperplasia is the second most common cause of dysfunctional uterine bleeding in the adult group.

Summary

The modern therapy for dysfunctional uterine bleeding consists of hormone therapy in the pubertal group, curettage plus hormone therapy in the childbearing age, and repeated curettage or hysterectomy in the menopausal group.

References

[1]Greenblatt, R. B., Management of functional uterine bleeding, M. Clin. North America, 34:1537, '50.
[2]Novak, E., Textbook of Gynecology, Baltimore, Md., Williams & Wilkins Co., ed. 2, 580-586, 1944.
[3]Buxton, C. L., and Engle, E. T., Diagnosis and Treatment of Gynecologic Endocrine Disorders, Springfield, Ill., Chas. C. Thomas, 36-42, 1950.
[4]Hamblen, E. C., Endocrinology of Woman, Springfield, Ill., Chas. C. Thomas, (Chs. 30-40), 1946.
[5]Brewer, John I., and Jones, H. O., Human corpus luteum, Am. J. Obst. and Gyn., 55: 18-45, '48.
[6]Meigs, J. V. and Sturgis, H. S., Progress in Gynecology, New York, Grune and Stratton, 1950, 2:176.
[7]TeLinde, R. W., Operative Gynecology, Philadelphia, Lippincott, 405-415, 1946.
[8]Randall, C. L., Hyperplasia and endomentrial carcinoma, J.A.M.A., 127: 30, 1945.
[9]Corscaden, J. A. and Gusberg, S., Relation of hyperplasia to endometrial carcinoma, Am. J. Obst. and Gyn., 53: 419-427, 1947.

Recent Advances in Dermatology

Carmen C. Thomas, M.D., Sc. D. (med.)

A PERUSAL of the medical literature of the past three years indicates much progress in the science of dermatology as well as in its practical applications to the field of therapy. The most striking advances have occurred, as in other branches of medicine, in the increasingly wide application of antibiotic therapy to infectious diseases of bacterial, treponemal, viral, and fungous origin, and in the application of the newer steroid hormones to the management of a number of serious dermatoses.

While many pyogenic cutaneous infections caused by penicillin sensitive organisms respond to the local application of penicillin, the high rate of occurrence of sensitization (10 percent) so caused has restricted the use of penicillin largely to the parenteral route. For the same reason the local use of streptomycin (4 percent) and aureomycin (2-3 percent)[1] has been restricted. The parenteral use of these antibiotics is becoming increasingly important as is attested by the vast literature. As drug fast bacterial strains develop, newer antibiotics or synergistic combinations of the well known ones are being used (sulfonamides plus penicillin plus streptomycin, bacitracin plus tyrothricin, etc.). The development of penicillin O (an allylmercaptomethyl compound) has permitted the use of this valuable antibiotic in patients sensitive to penicillin G (Volini[2] reported 89 percent of penicillin G sensitive patients able to tolerate penicillin O). The parenteral use of aureomycin, chloromycetin, and terramycin, has been reported to be of particular value in rickettsial and viral infections, notably the herpes group (Zoster [3, 4, 5] Kaposi varicelliform eruption[6]), in lymphogranuloma venereum,[7] granuloma inguinale,[8, 9] in resistant staphylo- and streptodermas, pemphigus, bullous erythema multiforme, dermatitis herpetiformis,[10] early and late cutaneous syphilides. The local use of aureomycin ointment has proven of value in local staphylococcal infections, notably sycosis of the beard, while notoriously refractory diseases such as aphthous stomatitis with and without concomitant Vincent's infection and herpetic stomatitis[11, 12, 13, 14] have been reported dramatically improved on aureomycin mouthwashes, gargles, and lozenges.

Locally applied bacitracin in aequeous solution or ointment form continues to occupy a place in the management of skin infections, largely because of its low index of sensitization (about 1 percent). Neomycin in solution or ointment form has had favorable results in pyogenic skin infections, as well as in those usually resistant ones due to Proteus vulgaris and Pseudomonas aeruginosa. It also appears to have a low index sensitization.[15]

In the field of fungus infections the antibiotics so far available have been disappointing. With the exception of actinomycosis, which has been effectively treated with sulfonamides, penicillin, and aureomycin, none of the deep and serious mycoses has been influenced. The promise of effective synergistic combinations of terramycin with, for example, thiolutin[16] awaits clinical trial.

Dr. Thomas is Professor of Dermatology and Syphilology, Woman's Medical College.

Reactions To The Anitbiotics

The increasing incidence of severe penicillin sensitization of the serum sickness type and of the angioneurotic edema type has been frequently noted in the literature, as have been the by effects of penicillin, chloromycetin, and aureomycin, particularly in the activation of previously latent fungus infections. Peck has stressed the activation of fungus infections of the feet in patients receiving penicillin therapy, a rather common occurrence in this country but apparently unusual in European countries where fungus infections are less prevalent.[17] Reports of oral and vaginal monilial infections, glossitis, hairy tongue, broncho-pulmonary and intestinal moniliasis are appearing in the literature.[18,19,20] These effects have been variously explained. A commonly held view is that the antibiotic alters the normal intestinal flora by destroying susceptible organisms and permitting the unhindered growth of fungi, especially Candida (monilia), although the question of interference with the biosynthesis of Vitamin B factors in the intestine is likewise implicated.

In the therapy of superficial fungus infections two apparently effective new agents have been introduced: nitro-furfuryl methyl ether (1 percent Furaspor®)[21] and 2-di methyl amino 6-beta-diethyl amino-ethoxy benzo-thiazole (2 percent asterol® dihydrochloride).[22] Both of these preparations have given satisfactory clinical results in tinea of the scalp caused by M. audouini (human type) in relatively short periods of treatment time (2 to 4 months), although, as Kligman and Anderson[23] state, the use of water soluble polyethylene glycol (carbowax) ointment bases may itself be a factor in the greater efficacy of local anti-fungus measures.

Antihistamines

The great importance of the field of allergic skin disease is attested to by the continued frantic search for adequate antihistaminics to control the many varied allergic onslaughts on the skin. The present consensus is that parenteral antihistaminics are most effective in the management of acute urticaria and angioneurotic edema, where their effectiveness is close to 80 percent, but they are approximately only 40 percent effective in localized and disseminated neurodermatitis, and practically useless in contact dermatitis.[24,25] The local use of antihistamines has been variously evaluated. Many reports confirm their effectiveness in the management of localized pruritus, although the lack of adequate controls in the cases reported is striking. A number of reports indicate that systemic antihistamine administration is of some value in the control of photosensitivity. The reports on the local application of antisunburn lotions, while at first enthusiastic, have shown a high percentage of contact sensitization, especially to preparations containing the para-amino benzoic acid derivatives.[26] Papers by Mayer,[27] and Baer[28] and Baer and Leider[29] demonstrate the apparent interrelationship of contact sensitivity of compounds of this type with that of sulfonamides, procain, certified food dyes, stocking, fur, and hair dyes, all of which are chemically interrelated.

Steroid Hormones

The appearance of ACTH, cortisone, and other steroids on the treatment horizon has led to their use in many dermatoses of unknown, of infectious, or infectious-allergic background. The experiences of the past three years suggest that they fill a very definite place in the management of several serious and often fatal diseases and that they have a useful field of application also in the treatment of serious allergic disturbances. The literature is vast. Lever[30] has recently given an inclusive and excellent review of the application of these hormones in the management of diseases of the skin. On the basis of this and other summary articles the consensus is that the dermatologic application of the cortieal steroids may best be divided into four classes. In those conditions where:

(1) they are definitely indicated and constitute the best treatment available (including acute systemic lupus erythematosus and dermatomyositis,[31,32,33,34] acute pemphigus,[35,36] and chronic idiopathic exfoliative dermatitis).

(2) they may be used selectively. In the management of the following acute self-limited diseases, a short course of steroid hormone therapy may cut disability time in half or more: severe drug eruptions, erythema multiforme, anaphylactoid purpura, and severe contact dermatitis.

(3) they are used exceptionally: in the chronic non-serious dermatoses, psoriasis, chronic eczema (atopic), chronic discoid lupus erythematosus, dermatitis herpetiformis, and sarcoidosis. The effects are transient, the disease usually promptly recurring when treatment is terminated.

(4) the steriod hormones are of little or no value, as in such chronic and serious dermatoses as mycosis fungoides and scleroderma. Opinion varies as to preference of ACTH over cortisone. The majority of reports seem to indicate a preference for the initiation of treatment with ACTH, then shifting to cortisone for maintenance therapy, chiefly because of the advantage of fewer doses, lower cost, and the possibility of oral administration.

The complications of steroid hormone therapy arise particularly after prolonged therapy. The restriction of fluids and of sodium and the administration of potassium salts usually prevents early difficulties. Concomitant therapy with the oral antibiotics is often advisable in older or debilitated patients to reduce the tendency to systemic infections. The danger exists of activating old tuberculous foci, healed peptic ulcers, previously controlled diabetes, and of precipitating an acute psychosis. Vascular occlusive effects have been reported, especially after prolonged therapy.[37] Dosage must be adequate in total daily amount and as to interval, with children tolerating much larger amounts than their proportion by weight would indicate. Some of the skin changes occurring during steroid hormone therapy for other diseases include hyperpigmentations, acneform lesions, hirsutism, striae, delayed healing of wounds, and the flattening of keloids.[38]

Other Steroids

Combinations of estrogens and antibiotics in acne have been reported by Andrews[39] and his associates to give results superior to any previous combination of treatment, including x-ray, in therapy of 384 patients. The use of female sex hormones in

the treatment of severe cystic and tropical acne in males as set forth by Barber for the British school of dermatology[40] has been variously supported in this country.[41]

Other Therapeutic Agents

Podophyllin in alcoholic or oil solution remains an effective therapy for soft warts, especially those involving the genitalia. Its apparently selective effect on warty, precancerous, and cancerous tissue has been variously investigated. Reports by Smith and Garrett[42] indicate a possible field of usefulness in senile and radiation keratoses, although this needs further confirmation as to superiority over other methods of treatment.

Caliciferol therapy continues to be of importance in the treatment of cutaneous tuberculosis. Toxic effects and resistance or relapse of lupus vulgaris lesions have prompted the search for other effective treatment methods. Cornbleet[43] reported good results in combining or alternating calciferol with streptomycin therapy. His work has been confirmed by the experience of Michelson.[44] Calciferol therapy is of doubtful value in tuberculids, and sarcoidosis.[45,46]

Mohs has extended his chemosurgical technique of treatment of carcinoma of the skin (by microscopically controlled excision) to the treatment of melanoma.[47] His rate of cure (35 percent after five years, in 20 patients) deserves further study, but the cumbersomeness of the method makes it of limited applicability.

Studies of safe cutaneous detergents and of methods of reducing the bacterial population of the skin surface have been continued. I. H. Blank[48] and Thirlby and Nesbit[49] confirmed the efficacy of hexachlorophene (G 11) in reducing the bacterial count of the skin surface. A short scrub followed by the 2-minute immersion of the hands in an alcoholic solution of hexachlorophene was found as effective as a 10-minute routine scrub.

The efficacy of BAL in arsenical toxicity has been repeatedly confirmed.[50] Dramatic results have been reported in mercurial poisoning,[51] acute antimony dermatitis,[52] and gold toxicity,[53] but failure has been reported in chronic silver poisoning (argyria).[54] Because of the repeated finding of a history of mercury exposure or ingestion in cases of acrodynia, Bivings and Lewis used BAL and obtained prompt clearing of the skin.[55]

Para-amino benzoic acid and its sodium salt have been advocated in the treatment of lupus erythematosus with questionably permanent improvement (Zarafonetis[56]), but with apparently some reduction of photosensitivity. More recently the same author reported remission of symptoms in 16 patients with dermatitis herpetiformis, maintained while the drug was continued.[57]

The early enthusiastic reports of the effects of undecyclenic acid in psoriasis have not only been unconfirmed, but increasing numbers of reactions have been reported, which include unpleasant gastrointestinal side effects, as well as gastrointestinal hemorrhages, exfoliative dermatitis, and toxic labyrinthitis.[58,59,51]

The hypospray (a high pressure jet injection method which employs no needle) has been made the subject of extensive study by Preston, Goldman, and Thompson.[60] Their report indicated that this may become a useful tool in the production of local anesthesia, in the treatment of localized forms of pruritus, in the injection of antibiotics, and the treatment of certain parasitic infestations (for example, larva migrans).

Advances in Diagnostic Methods and Fundamental Studies

The practicability of an easy demonstration of fungi in skin scrapings, in exudates, and in tissue sections by means of the periodic acid- Schiff technique has been shown by the work of Kligman, Mescon, and Delamater.[61] This method vastly facilitates the search for hitherto hard to see fungus elements by making them stand out vividly in a bright magenta color in sections.

Studies on the formation of melanin in human skin have thrown considerable light on the mechanism of pigment formation. Fitzpatrick, Becker, Lerner, and associates[62,63] have shown the presence of the enzyme tyrosinase in human skin, which, in the presence of dopa, copper, and in a delicate adjustment with sulfhydryl compounds, responds to the action of ultraviolet light with the formation of melanin. The potential applications of this finding include such possibilities as the local production at will of increased or decreased pigmentation.

The significance of the positive plasma LE cell (lupus erythematosus) test in the group of diseases commonly designated as collagen diseases has been discussed in a recent summary by Haserick,[64] one of the investigators responsible for its present development. As now performed, with plasma from the suspected patient and bone marrow (normal human or dog), or with buffy coat from normal peripheral blood (Barnes-Moffat),[65] if rosettes of clumped leukocytes occur (positive LE test) the probability is that the patient has systemic lupus erythematosis. According to Haserick the test is likewise of value in remissions of the disease, a statement questioned by other investigators. False negative tests have been reported and are attributed by Haserick to abnormally low gamma globulins. False positives have also been reported in the litera-

ture, although there is much confusion due to different techniques of performing the test and different interpretations of the clumping and rosette formations. Recently[68] the simulation of the LE phenomenon by fungi, especially aspergillus, has also been reported. As matters now stand the test promises to be of considerable importance, especially in the diagnosis of patients who are clinically difficult to classify.

References

[1]Miller, J. L., Dermatology symposium; pyogenic infections of skin, Modern Med. **18:** 114-116, Nov. 15, '50.

[2]Volini, I. F., Shlaes, W. H., and Felsenfeld, O., Use of penicillin O in patients hypersensitive to penicillin G, J.A.M.A. **143:** 794-797, July 1, '50.

[3]Philip, A. J., Aureomycin in treatment of diseases of skin, Urol. & Cutan. Rev. **54:** 222-224, April '50.

[4]Grund, J. L., Oral administration of aureomycin in treatment of certain dermatoses, New England J. Med. **242:** 928-930, June 15, '50.

[5]Finland, M., and others, Aureomycin treatment of herpes zoster, New England J. Med. **241:** 1037-1047, Dec. 29, '49.

[6]Baer, R. L., and Miller, O. B., Aureomycin therapy of disseminated cutaneous herpes simplex (Kaposi's vericelliform eruption), J. Invest. Dermat. **13:** 5-7, July '49.

[7]Robinson, R. C. V., Aureomycin in treatment of gonorrhea in male, Am. J. Syph. **34:** 64-66, Jan. .'50.

[8]Robinson, R. C. V., Elmendorf, A. F., Jr., and Zheutlin, H. E. C., Aureomycin in treatment of granuloma inguinale, Am. J. Syph. Gonor. & Ven. Dis. **33:** 389-396, July '49.

[9]Wammock, V. S., and others, Aureomycin in treatment of granuloma inguinale and lymphogranuloma venereum, J. Invest. Dermat. **14:** 427-434, June '50.

[10]Robinson, H. M., Robinson, H. M., Jr., and Robinson, A. C. V., Therapeutic value of aureomycin in dermatitis hereptiformis, J. Invest. Dermat. **13:** 9-12, July '49.

[11]Fisher, A. A., and Schwartz, S., Stomatitis ulceromembranosa acuta treated with aureomycin, J. Invest. Dermat. **13:** 51-52, Aug. 49.

[12]Distelheim, I. H., and Sulzberger, M. B., Aureomycin employed locally in painful mouth ulcerations (stomatitis apthosa or periadenitis mucosa necrotica recurrens), J. Invest. Dermat. **13:** 115-117, Sept. '49.

[13]Rosenberg, E., and Levy, A. T., Aureomycin and stomatitis aphthae, J. Calif. Dental Assoc. **26:** 172-173, July-Aug. '50.

[14]Arnold, H. L., Jr., Domzalski, C. A., Jr., and Austin, E. R., Aureomycin mouthwash for herpetic stomatitis, Proc. Clin., Honolulu, **15: 85,** Nov. '49.

[15]Kile, R. Welsh, A. L., and McAfee, G. D., Topical use of neomycin; preliminary report, Arch. Dermat. & Syph. **62:** 911, Dec. '50.

[16]English, A. R., Tate, K. B., and Goulet, P. L., Synergistic antibiotic combinations containing terramycin and one other antibiotic, Bact. Proc. 31-32, May 27-31, '51.

[17]Hagerman, G., On topical treatment with penicillin and concomitant hypersensitivity reactions, Acta derm. vener. **30:** 259-285, No. 3, '50.

[18]Peck, S. M., and Feldman, F. F., Sensitivity reactions to aureomycin, J.A.M.A., **142:** 1137-1139, April 15, '50.

[19]Woods, J. W., Manning, I. H., Jr., and Patterson, C. N., Monilial infections complicating therapeutic use of antibiotics, J.A.M.A. **145:** 207-211, Jan. 27, '51.

[20]Harris, H. J., Aureomycin and chloramphenicol in brucellosis; with special reference to side effects, J.A.M.A. **142:** 161-165, Jan. 21, '50.

[21]Robinson, H. M., Robinson, H. M., Jr., and Link, H. V., Furaspor in treatment of tinea capitis, Bull. School Med. Univ. Maryland, **35:** 104-106, July '50.

[22]Stritzler C., Fishman, I. M., and Laurens, S., Treatment of tinea capitis with new antifungal compound; preliminary report, Arch. Dermat. & Syph. **63:** 606-610, May '51.

[23]Kligman, A. M., and Anderson, W. W., Evaluation of current methods for local treatment of tinea capitis, J. Invest. Dermat. **16:** 155-168, March '51.

[24]Downing, J. G., Medical progress; dermatologic therapy, New England J. Med. **242:** 546-552, April 6, '50.

[25]Waldriff, G. A., Davis, J., and Lewis, G. M., Antihistaminic drugs in dermatologic therapy, Arch. Dermat. & Syph. **61:** 361-378, March '50.

[26]Peck, S. M., Role of antihistaminic drugs in producing cross-sensitization dermatitis, New York State J. Med. **50:** 2690-2693, Nov. 15, '50.

[27]Mayer, R. L., Experimental sensitization with food dyes and cross-sensitization to paraphenylenediamine, J. Allergy, **20:** 159-166, May '49.

[28]Baer, R. L., Examples of cross sensitization in allergic eczematous dermatitis, Arch. Dermat. & Syph. **58:** 276-285, Sept. '48.

[29]Baer, R. L., and Leider, M., Effects of feeding certified food azodyes in paraphenylenediamine-hypersensitive subjects, J. Invest. Dermat. **13:** 223-232, Nov. '49.

[30]Lever, W. F., ACTH and cortisone in diseases of skin, New England J. Med. **245:** 359-363, Sept. 6, '51.

[31]Brunsting, L. A., Slocumb, C. H., and Didcoct, J. W., Effects of cortisone on acute disseminated lupus erythematosus, Proc. Staff Met., Mayo Clin. **25:** 479-482, Aug. 16, '50.

[32]Soffer, L. J., Levitt, M. F., and Baehr, G., Use of cortisone and adrenocorticotropic hormone in acute disseminated lupus erythematosus Arch. Int. Med. **86:** 558-573, Oct. '50.

[33]Brunsting, L. A., Slocumb, C. H., and Didcoct, J. W., Effects of cortisone on acute disseminated lupus erythematosus, Arch. & Syph. **63:** 29-52, Jan. '51.

[34]Haserick, J. R., Corcoran, A. C., and Dustan, H., ACTH and cortisone in acute crisis of systemic lupus erythematosus, J.A.M.A., **146:** 643-646, June 16, '51.

[35]Frazier, C. N., Lever, W. F., and others, Preliminary and short reports; effect of adrenocorticotropic hormone (ACTH) and cortisone on several varieties of pemphigus, J. Invest. Dermat. **17:** 55, Aug. '51.

[36]Cannon, A. B., and others, Pituitary adrenocorticotropic hormone (ACTH) and cortisone in diseases of skin; I. pemphigus vulgaris and other bullous dermatoses, J.A.M.A. **145:** 201-206, Jan. 27, '51.

[37]Irons, E. N., Ayer, J. P., Brown, R. G., and Armstrong, S. H., Jr., ACTH and cortisone in diffuse collagen disease and chronic dermatoses; differential therapeutic effects, J.A.M.A. **145:** 861-869, March 24, '51.

[38]Behrman, H. T., and Goodman, J. J., Skin complications of cortisone and ACTH therapy, J.A.M.A. **144:** 218-221, Sept. 16, '50.

[39]Andrews, G. C., Domonkos, A. N., and Post, C. F., Treatment of acne vulgaris, J.A.M.A., **146:** 1107-1113, July 21, '51.

[40]MacKenna, R. M. B., Modern trends in dermatology, p. 125, Paul Hoeber, 1948.

[41]Sulzberger, M. B., and Witten, V. H., Hormones and acne vulgaris, M. Clin. North America **35:** 373-390, March '51.

[42]Smith, L. M., and Garrett, H. D., Resin of podophyllum in treatment of cancerous and precancerous condition of skin, Arch. Dermat. & Syph. **61:** 946-956, June '50.

[43]Cornbleet, T., Combined calciferol and streptomycin in lupus vulgaris, J.A.M.A. **138:** 1150-1153, Dec. 18, '48.

[44]Michelson, H. E., Calciferol in treatment of cutaneous tuberculosis, Arch. Dermat. & Syph. **58:** 680-695, Dec. '48.
[45]Pascher, F., Silverberg, M. G., and others, Therapeutic assays of New York Skin and Cancer Unit, Post Graduate Medical School, New York University-Bellevue Medical Center; calciferol (D_2), J. Invest. Dermat. **12:** 193-202, March '49.
[46]Nelson, C. T., Calciferol in treatment of sarcoidosis, J. Invest. Dermat. **13:** 81-84, Aug. '49.
[47]Mohs, F. E., Chemosurgical treatment of melanoma; microscopically controlled method of excision, Arch. Dermat. & Syph. **62:** 269-279, Aug. '50.
[48]Blank, I. H., and Coolidge, M. H., Degerming cutaneous surface; I. quaternary ammonium compounds, J. Invest. Dermat. **15:** 249-256, Sept. '50.
[49]Thirlby, R. L., and Nesbit, R. M., Clinical evaluation of bactericidal detergent for hand preparation in urologic practice, J. Urol. **62:** 617-621, Oct. '49.
[50]Dattner, B., Distelheim, I. H., and Meltzer, L., BAL in arsenical optic neuritis, New York State J. Med. **49:** 190-192, Jan. 15, '49.
[51]Williams, B. H. and Beach, W. C., Idiosyncrasy to ammoniated mercury, J.A.M.A. **142:** 1286-1288, April 22, '50.
[52]Rittey, D. A. W., Dimercaprol (BAL) in acute antimony dematitis, Lancet **1:** 255, Feb. 11, '50.
[53]Montgomery, M. M., Use of BAL in treatment of skin reactions due to gold therapy, Ann. Int. Med. **33:** 915-924, Oct. '50.
[54]Rosenthal, T., and Ollswang, A., Failure of s, 3-Dimercaptopropanol (BAL) in treatment of argyria, Arch. Dermat. & Syph. **57:** 743-745, April '48.
[55]Bivings, L., and Lewis, G., Acrodynia: new treatment with BAL, J. Pediat. **32:** 63-65, Jan. '48.
[56]Zarafonetis, C. J. D., Grekin, R. H., and Curtis, A. C., Further studies on treatment of lupus erythematosus with sodium para-aminobenzoate, J. Invest. Dermat., **11:** 359-381, Nov. '48.
[57]Zarafonetis, C. J. D., Johnwick, E. B., Kirkman, L. W., and Curtis, A. C., Para-aminobenzoic acid in dermatitis herpetiformis, Arch. Derm. & Syph. **63:** 115-132, Jan. '51.
[58]Behrman, H. T., Undecylenic acid in psoriasis, J.A. M.A. **141:** 407, Oct. 8, '49.
[59]Hand, E. A., and Wilkinson, C. F., Jr., Toxic labyrinthitis following oral undecylenic acid treatment of psoriasis; report of case, J. Invest. Dermat. **14:** 227-228, April '50.
[60]Preston, R. H., Goldman, L., and Thompson, R. G., Use of hypospray in dermatology, Arch. Dermat. & Syph. **64:** 327-339, Sept. '51.
[61]Kligman, A. M., Mescon, H., and DeLamater, E. D., Hotchkiss-McManus stain for histopathologic diagnosis of fungus diseases, Am. J. Clin. Path. **21:** 86-91, Jan. '51.
[62]Fitzpatrick, T. B., Lerner, A. B., Calkins, E., and Summerson, W. H., Mammalian tyrosinase; melanin formation by ultraviolet irradiation, Arch. Dermat. & Syph. **59:** 620-625, June '49.
[63]Fitzpatrick, T. B., Becker, S. W., Jr., Lerner, D. B., and Montgomery, H., Tyrosinase in human skin: demonstration of its presence and role in human melanin formation, Science, **12:** 223-225, Aug. '50.
[64]Haserick, J. R., Plasma, L. E. test in systemic lupus erythematosus; study of 23 patients with positive L. E. tests, J.A.M.A. **146:** 16-20, May 5, '51.
[65]Barnes, S. S., Moffatt, T. W., Lane, C. W., and Weiss, R. S., Studies on L. E. phenomenon, Arch. Dermat. & Syph. **62:** 771-785, Dec. '50.
[66]Haserick, J. R., Simulation of lupus erethematosus phenomenon by materials of fungal origin, J. Invest. Derm. **16:** 211-215, April '51.

Cystic Fibrosis of the Pancreas

CASE REPORT

Benjy Brooks, M.D.

THE CASE HERE PRESENTED adds one more to the relatively few cases of fibrocytic pancreatitis in which the patient survived without any marked changes in growth or development.

Although this child has had repeated respiratory infections, no evidence of bronchiectasis has been found to date. The organism cultured from nasal and bronchial secretions has always been a coagulose positive Staphylococcus aureus which responds readily to penicillin therapy.

Dr. Brooks was formerly Resident in Pediatrics, Woman's Medical College. This case is reported from the Pediatric Service of Dr. Jean Crump.

Case Report

G. K., a white female, was first seen at the age of four months (April, 1945) by Dr. Jean Crump. She had been born prematurely (8 months gestation), weighed 5 pounds at birth, and had failed to gain weight and to digest food. At four months, her weight was 6 pounds. Her mother reported that she had seven or eight large, watery, foul-smelling stools daily. Physical examination revealed a dehydrated infant with anxious facies. There was obvious respiratory difficulty with sub-costal retraction and audible wheezing. The abdomen was protuberant and "doughy." She was admitted to the hospital and duodenal drainage studies were done, which demonstrated a deficiency of pancreatic enzymes, indicating cystic fibrosis of the pancreas.

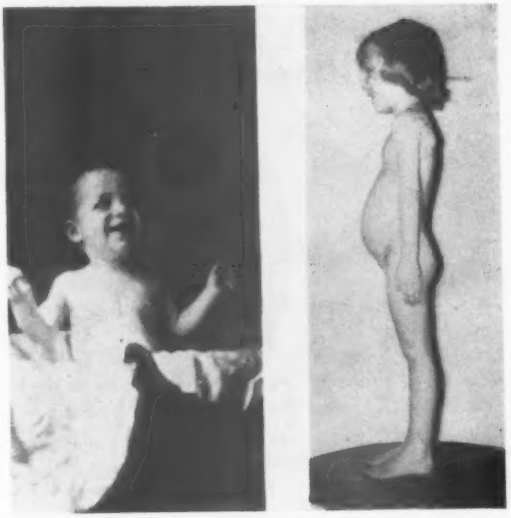
She was started on pancreatin, ascorbic acid, and vitamin B_1. It was found that Nutramigen was the only food on which she gained any weight and on which foul-smelling, large stools did not occur. At six months, her weight was 10 pounds. At the age of one year, after two attacks of bronchopneumonia, pertussis, and at least three upper respiratory infections, she weighed

15 pounds, had six teeth, and was walking around her crib. At two years of age, she weighed 22 pounds. Tonsillectomy and adenoidectomy were performed at this time, in the hope that the number of upper respiratory infections from which she suffered would be reduced. Her economic and social status was poor, and it was difficult to obtain full cooperation from her mother. When she was three years old, her weight was 31 pounds. The diet still consisted of Nutramigen, plus pancreatin and supplementary vitamins. Bananas, cottage cheese, and so forth, were not tolerated. She was seen several times by an ear, nose, and throat specialist, who felt that there was an allergic component to her upper respiratory difficulties. For this reason she was treated by injections of a vaccine made from bronchial secretions obtained through the bronchoscope. During this year she had at least eight upper respiratory infections, one attack of bronchopneumonia, and varicella. Roentgen examination of her wrists at this time showed the bone age to be that of two years. At four years of age she weighed 37 pounds. During the past year she had been able to eat foods such as cottage cheese, bananas, cereals, soups, and honey, without developing copious stools, but it was observed that her stools contained undigested food. Nutramigen eqivalent to 3,000 calories was given daily. She was still having frequent attacks of upper respiratory infections and had had suppurative otitis media. Her respiratory infections responded well to penicillin. Nutramigen was discontinued during this year for a period of one month, resulting in a weight loss of 2 pounds.

At the age of seven years, she was again admitted to the hospital with an upper respiratory infection. Her weight was 42 pounds, height, 43½ inches. She had attended school all that year and had done exceptionally well, having had only two mild upper respiratory infections and rubella, with complications. Duodenal drainage was again performed with the following results: lipase, 0.6 cc. of O.1N sodium hydroxide (normal, 10 cc. or more); tryosin, no liquefaction present (normal, 0.2 cc. or less); amylase, 0.6 Gm. of glucose in 1,000 cc. (normal, 2 Gm. in 1,000 cc.).

Bronchoscopy was performed and much less mucopurulent secretion was found than in most cases of cystic fibrosis of the pancreas. A bronchogram with mapping of all lung segments showed no evidence of bronchiectasis.

The gelatin film test of Shwachman[1] was applied to the fecal specimen and it was found to contain trypsin (3 plus) in a 1 to 10 dilution. Pancreatin had been discontinued for three days preceding the test, but the patient was receiving penicillin. The fecal specimen was cultured by the Department of Bacteriology, Woman's Medical College, and a gram-negative bacillus (Proteus) was obtained, which digested a casein mixture; but no bacteria isolated liquefied gelatin. It is supposed now that the penicillin therapy the patient received contributed to the "false positive" gelatin film test. No dilutions of fecal suspensions, as suggested by Johnstone and Neter,[2] were made.



G. K. at age of one year and five years.

Summary

1. A case of cystic fibrosis of the pancreas is reported in a patient who is now seven years of age and who has not developed the usual lung findings to date.

2. Nutramigen* seems to be the only food that the patient is able to digest and assimilate.

3. A "false positive" gelatin film test was obtained on a fecal specimen, probably because of gelatin-liquefying bacteria.

*Nutramigen was supplied by Mead Johnson & Co.

References

[1]Shwachman, H., Farber, S., and Maddock, C. L., Pancreatic function and disease in early life. III. Methods of analyzing pancreatic enzyme activity, Am. J. Dis. Child., 66: 418, Nov. '43.

[2]Johnstone, D. E., and Neter. E., Studies on the laboratory diagnosis of cystic fibrosis of the pancreas, Pediatrics, 7: 483-490, Apr. '51.

Moniliasis: Side Effect of Antibiotic Therapy

Emma Dowling Kyhos, M.D.

NUMEROUS INVESTIGATORS have pointed out the possibility of superimposed infections as side effects of antibiotic therapy. This has led to serious consideration of the problem, and the Council on Pharmacy and Chemistry issued a warning statement[1] to be added to the labeling of certain antibiotics because of the danger of monilia or other yeast-like organisms replacing the normal bacterial flora destroyed by the antibiotics.

A recent paper in the British Medical Journal[2] is concerned with the side effects of antibiotics with special reference to oral lesions. The authors note that the most striking changes encountered as a result of chloromycetin treatment were in the oral cavity, where tongue scrapings revealed a rapid disappearance of normal bacteria and the establishment of a fungus flora, usually C. albicans (Monilia). Woods, Manning, and Paterson[3] have published a paper on the subject of monilial infections complicating the therapeutic use of antibiotics. Twenty-five cases of moniliasis, confirmed by culture, followed the use of penicillin, aureomycin, and chloramphenicol; 20 of these were in the oropharynx. Stritzler and his associates[4] reported that monilial infections of the glabrous skin and nails respond more favorably to Asterol® dihydrochloride than to other antifungal medications. Therefore, it seemed logical to try this compound also in the treatment of oral moniliasis.

The following report of a case of oropharyngeal moniliasis, verified by cultures, which followed aureomycin and penicillin therapy, is presented to show the prompt results obtained by treatment with Asterol.®

CASE REPORT

W. M., a 36-year-old white male, complained of severe sore throat which he had treated by gargles of peroxide and saline for two weeks, after which he visited his physician, who gave him penicillin intramuscularly and aureomycin orally in capsules and in the form of lozenges. For a previous sore throat about a month before, he had used aureomycin lozenges with relief of symptoms. The patient stated that medical treatment had been carried out for a week with no relief; instead, the soreness and pain had increased and spread to include the entire mouth so that by the end of the week he was unable to eat. Swallowing was difficult. He stated that the therapy had consisted of "three or four penicillin injections," aureomycin lozenges (total number, 17), and 9 capsules of aureomycin (250 mg. each).

Examination revealed an acutely inflamed and injected mucosa of the entire mouth and pharynx with patchy lesions especially noted in the buccal areas and extending to the mucocutaneous junction of lip angles. Marked tongue color changes were present, but there were no coating and no patches. Edema was present but not severe. The clinical impression of oral moniliasis was confirmed by laboratory findings. A photograph of bacteriological plates from the laboratory of Drs. Schnitzer and Grunberg (figure 1) shows the luxuriant growth of C. albicans obtained from cultures before treatment contrasted with cultures obtained six days later. Figure 2 shows the tongue and palate of the patient before and after treatment with Asterol® Citrate.

Dr. Kyhos is Chief Dispensary Physician, Hoffman-LaRoche Inc., and Staff Physician, New York City Nutrition Clinics.

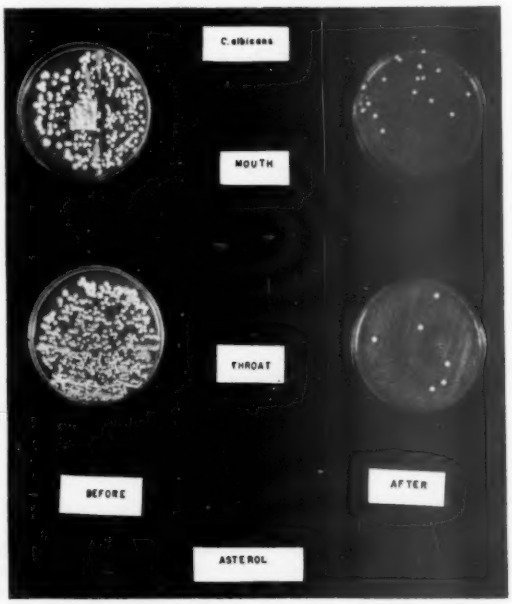


Fig. 1. **Throat and buccal mucosa cultures taken before Asterol® treatment was begun on May 22, compared with cultures taken May 28.**

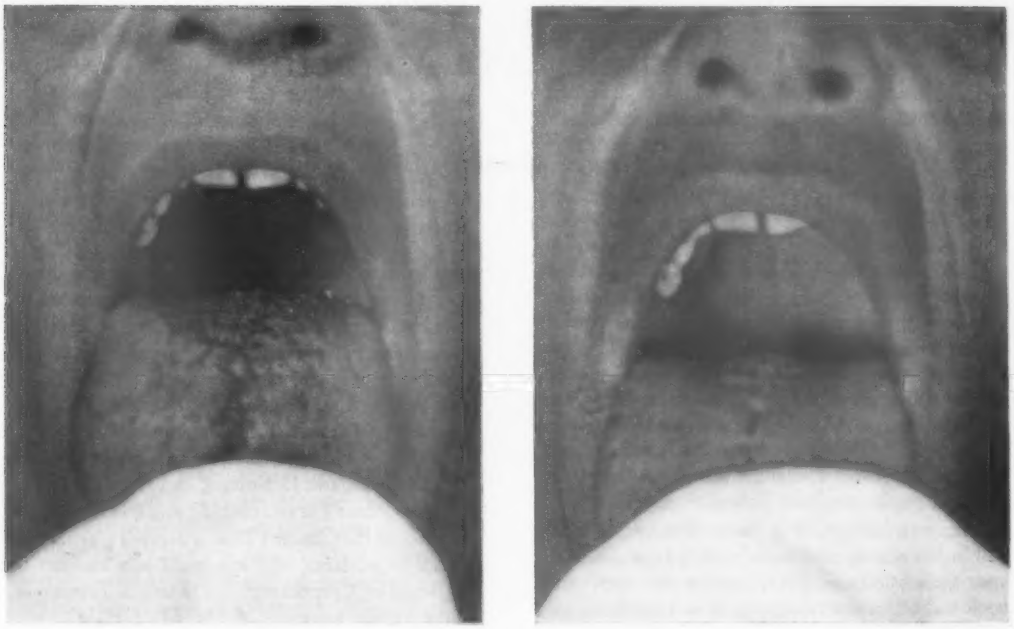


Fig. 2. **Tongue and palate before and after treatment of acute moniliasis. Note angry red palatal mucosa and patchy white surface of tongue before use of Asterol.®**

Treatment was begun with an application of 2 percent aqueous Asterol® citrate solution, ("Experimental Preparation"). The patient was instructed to use a diluted (1 teaspoonful to one-half glass water) Asterol® mouth wash three times a day, with daily swabbing with the full strength preparation. Symptoms subsided with remarkable speed and a full meal was eaten comfortably within five hours. During the 24-hour period following the initial application all symptoms disappeared, but color changes and some injection were still present the next day. At the next examination, made two days later, all signs of infection, except redness of throat and tongue, had disappeared. There was no pain or discomfort after the first 24 hours. Treatment was given over three days. There have been no recurrence and no complaints of any nature in the three months following Asterol® treatment.

Summary

A case of oropharyngeal moniliasis, occurring in an adult who had been previously treated with aureomycin and penicillin, showed prompt response to local administration of Asterol®, an antifungal preparation.

References

[1]Council on Pharmacy and Chemistry, Labeling Statement: Warning, J.A.M.A. 145: 1267, April 21, '51.

[2]Tomaszewski, T., and Paznan, M. D., Side-effects of chloramphenicol and aureomycin, Brit. M. J. 1: 388-391, Feb. 24, '51.

[3]Woods, J. W., Manning, I. H., and Patterson, C. N., Monilial infections complicating therapeutic use of antibiotics, J.A.M.A. 145: 207-211, Jan. 27, '51.

[4]Stritzler, C., Fishman, I. M., and Laurens, S., Treatment of superficial fungus infections with a new antifungal agent, Trans. N. Y. Acad. Sc. 13: 31-37, Nov. '51.

The Privileges of Medicine*

Burgess Gordon, M.D.

I AM HERE TODAY to wish you, the students of the first year class of the Woman's Medical College, a warm and hearty welcome, and to mention that we are debutantes together! Those of you in the upper classes, I welcome back to your labors and successes. And to Dr. Marion Fay, Dean, and Mr. Donald C. Rubel, Chairman of the Board of Corporators, I want very especially to say that I am most enthusiastic about my new position and I appreciate your cordial welcome.

Since you have made a choice of medicine, there will be no dearth of those who will urge upon you your responsibilities. Every lecture and every textbook will direct you to conditions and problems, and every day of your college life will lay upon you its duties. I thought it well to speak briefly to you of that other side which lies before you, not so ready to your hand today as it will be later, but still most tangible and satisfying: the *privileges* of medicine.

It is a great and thrilling privilege to study and to practice medicine, to observe the entangled as well as the factual nature of disease, to witness the dramatic advances of surgery and preventive medicine, to be entrusted with the care of the sick, to serve the poor as well as the affluent, to cushion the penalties of old age and physical disability, and to reduce the hazards of industrial development. In the special facets, for those with incentive and a flair for academic pursuits, there are the wider opportunities for research, teaching, writing, and administration, for serving the community in sociological, mental, and physical guidance. The rewards may be lucrative, may bring social prestige, but with the true physician, love for the profession, gratification in service, and sense of accomplishment are the basic virtues.

Many graduates of the Woman's Medical College are rising steadily in their profession. Some have made notable contributions, emphasizing the fact that intuition, patience, understanding, and systematic thinking, the natural qualities of women, are invaluable prerequisites for the practice and teaching of medicine. A few have gone beyond the confines of ordinary practice, as for example: Dr. Catharine Macfarlane, who, while practicing gynecology, has become an outstanding authority in cancer control, and a "spark plug" in the development of the College; Dr. Margaret C. Sturgis, an early associate of Dr. Macfarlane's in establishing and conducting the activities of the Cancer Clinic, a beloved teacher and advisor to students, who continues as a member of the Board of Corporators; Dr. Faith S. Fetterman, also a former associate of Dr. Macfarlane's, who founded the Department of Urology; and Dr. Ellen C. Potter, the first intern of the Hospital, the first woman to be Secretary of the Department of Welfare of the Commonwealth of Pennsylvania, Emeritus President of the College, and now a member of the Board of Corporators, who continues, in the words of her friends, as "one of the indestructibles."

I have referred to women physicians who have attained the rewards and privileges of medicine, but there are other members of the College holding doctorate and other degrees in chemistry, physiology, pathology, and bacteriology, who have participated both directly and indirectly in the education of students and in the study of patients. These women are the backbone of fundamental training, without which the clinical aspects of medicine could not be taught. I want to mention also the nurses, whose services parallel those of the practitioners and teachers. They, too, share in the privileges of medicine.

The views expressed about the capabilities and contributions of women physicians, potential and real, are not fully accepted in the world today, seemingly because the opportunities in medicine through the ages have been largely reserved for men. Almost alone, the Woman's Medical College has taken issue with this concept through her rugged founders, builders, faculty, staff, and graduates. She has cultivated confidence in her students in providing sound, systematized education and medical service of superior quality.

**Address delivered by Dr. Burgess Gordon, newly elected President of the Woman's Medical College of Pennsylvania, to the students of the College at the opening exercises, September 12, 1951.*

During my recent sojourn in Nashota, a summer colony in Wisconsin, old friends displayed great interest and enthusiasm in my appointment at Woman's Medical College. Some, admittedly, knew very little about women physicians. They speculated about women undertaking the study of medicine when their personal interests leaned to business, social service, writing, teaching, science, or matrimony. Some thought there would be a greater advantage economically, socially, and medically, for all concerned, if women were not encouraged to enter the profession. A few, however, considered that the limited openings in coeducational medical schools were sufficient for those who exhibited a proved and persistent desire to study medicine.

In the light of these discussions, a close friend and I embarked on a tour that brought us in contact with a number of women physicians and with the institutions they served. The first call was on a recent graduate of Woman's Medical College who was in charge of a mental health clinic sponsored by the Parker Pen Company, in Janesville, Wisconsin. Our visit discovered a woman of great energy, enthusiasm, knowledge, and confidence. Her clinic had the earmarks of excellent administration and service to industry and to the general community, and exemplified the worth of a woman in medicine. We left with the strong conviction that no one could have attained greater recognition in so short a time. Next we visited St. Luke's Hospital in Milwaukee where a woman physician, a graduate of the University of Wisconsin, is Chief of the Division of Gynecology. Here was a woman greatly admired by male associates because of her skillful surgery and contributions to cancer control. The questions raised at Nashota were put to her and received strong and critical answers. She stated that the services of women physicians in the Middle West were in great demand and that coeducational medical schools had not provided sufficient graduates for practice, the specialties, industry, and public health. It was her view that Woman's Medical College held a unique and valuable position in giving to women an unchallenged opportunity for the study and practice of medicine. Our third visit was to the Blood Bank of Milwaukee, sponsored by the Junior League, where we met an attractive, spirited, highly intelligent woman serving as clinic physician. She was married and very much "on-the-ball" in her domestic, social, and professional activities. When told that I expected to speak to students of the Woman's Medical College at the opening exercises, she said, "Tell those young things they are the luckiest girls in the world to have selected medicine as a career. They will find untold interests, gratification, pleasure, and the opportunity, at some later day, of extending their knowledge and skills into the broader aspects of human betterment . . . Whether married or single," she said, "life will go busily, merrily along." And she added, "They should not worry if they come a cropper now and then."

On leaving Nashota, my friend pondered seriously the question of women physicians. He had contemplated, listened, talked, and seen. A few days ago I received a postcard giving his final verdict. On it was pasted a clipping from the *Reader's Digest,* September issue, 1951, quoting Frances Perkins, who was once asked if she felt that being a woman was a handicap. She replied, "Only in climbing trees."

But I believe even this exception should be reconsidered. I say that women can climb trees. They can ascend to great heights; they can practice medicine successfully; they can and do extend their activities into the world-wide fields of their profession.

The Woman's Medical College maintains superior standards in order that its graduates may be launched effectively into the practice and the privileges of medicine. The course is rigorous, but you will find the studies stimulating and satisfying. The Board of Corporators, the Faculty, the Alumnae, and the Woman's Auxiliary join with me in wishing you success in your endeavors.

For the articles in this, the Woman's Medical College Number, the editors are grateful to Dr. Carmen C. Thomas, the able Guest Editor of the special numbers of this JOURNAL which have been contributed annually by the Woman's Medical College of Pennsylvania.

The Training of the Medical Student

I. PRE-PROFESSIONAL EDUCATION

Irene E. Maher, M.D.

THE TENDENCY TO SUBSTITUTE the term "pre-professional education" for the more familiar "pre-medical education" is an indication of the change in the attitude of medical educators and medical college admissions committees toward the problem of preparation of the applicant for medical school. There are two reasons for this, both having resulted from the realization that the narrow pre-medical requirements of the last twenty-five years leaned too heavily on the sciences and gave a highly specialized point of view too early in the education of this group of students.

The first reason can be discussed briefly. Pre-medical advisers from the undergraduate colleges were confronted each year with the problem of what to do with the large numbers of students trained for one purpose only—entrance to medical school—who were not accepted for medical training. Many of them had not fulfilled the requirements in a major subject and could not go on for a degree without taking additional work. Some colleges have solved this problem by setting up basic courses which prepare students for a number of professional careers; others merely blamed the medical schools for not taking a larger number of their students. The medical schools have tried to meet this criticism by increasing their first year classes, some of them at the risk of lowering standards, for they do not have the laboratory space nor the instructors necessary to take care of such an increase. The medical schools have also urged the pre-medical advisers to try to eliminate the poorer students by selection before they apply to medical schools. It is surprising that, in spite of the wide publicity given to the large number of medical applicants who must be rejected each year, there are still mediocre and inferior students with low grades in sciences and other courses who persist in continuing pre-medical training and in applying to medical schools.

Dr. Maher is Assistant Dean, Woman's Medical College of Pennsylvania.

The second reason for the change in emphasis from all science to a broader training is the change in medical education itself. After the publication of the Flexner Report in 1910, medical schools throughout the country raised their standards, tightened entrance requirements, and emphasized the need for precise scientific training. In the next two decades the entrance requirements for the sciences were increased and were rigidly enforced; chemistry requirements went up from 8 to 18 hours; more physics, more zoology, more mathematics were made mandatory. With many schools requiring a total of only 60 hours for entrance, there was no chance to include literature or philosophy or sociology. Unless a student came to college with a background of these cultural courses, he was apt to emerge from medical school with excellent technical training but ill equipped to deal with the sociologic and economic problems of medicine in the modern world.

This fact became more and more apparent. In a world where the physician must take his place as a citizen and cannot remain as a passive bystander, interested only in healing the individual patient, he has to concern himself with hospital, community, national, and international problems. The very science which isolated him by too specialized a training has brought to him the necessity for trying to understand the complex economics of hospital management, community responsibility for the medically indigent, national interest in health, and international stakes in disease prevention.

The medical schools, some of them slowly, are realizing all this and are liberalizing their science requirements and advising courses in philosophy, economics, and the humanities. It is a difficult task to fit all these studies into the pre-professional course without further lengthening the eight, nine, or ten years of the present training period. Somehow, the doctor must be given enough mathematics and physics to handle intelligently the x-ray, radioactive isotopes, and other new tools of his profession, and enough chemistry to understand hormone structure and function or vitamin-enzyme action.

It is even more imperative that his ethical and social training enable him to understand the moral implications of radioactive weapons, bacteriologic warfare, and hormone therapy.

Pre-professional education is a big job. It will take the concerted action of primary and secondary schools and the colleges to produce the foundation for medical training. At least, we have progressed somewhat in that the medical schools and the colleges have recognized the problem and are discussing it together. In October, 1950, at Lake Placid, the pre-medical fraternity, Alpha Epsilon Delta, conducted round table discussions with the representatives of the Association of American Medical Colleges and a number of problems were clarified at that time.

Long ago, most colleges stopped giving inferior science courses labelled "pre-medical" which were begun in the belief that the doctor could do with a smattering of science as he would not need it anyway. Now, the over-insistence on science is changing to the realization that if a doctor is to treat the whole patient, he must understand something of the stresses and strains under which the patient lives today.

So, the catalogues of the medical schools are beginning to have much more interesting reading under "entrance requirements." Some of the colleges accuse the medical schools of giving lip service only to this philosophy; but most medical schools are honestly trying to work out a balanced program which will produce not a technically trained medical isolationist but a well coordinated physician who can face the complex problems of medicine today with something better than prejudice born of ignorance. If the medical educators can solve the problem of pre-professional education, their graduates will solve even greater difficulties, not only in the hospital and the laboratory, but also in daily living.

II. TRENDS IN MEDICAL EDUCATION

Marion Fay, Ph.D.

THE CURRICULUM COMMITTEES in the medical schools of today are facing the same problem with which a librarian struggles: What can be discarded to give room to the new material which is being added at such a rapid pace? This is a constant problem, and it is accentuated at this time by the amount of material on the effects of atomic, bacteriologic, and chemical warfare which the schools are planning to include in their curricula.

Some schools are adding to the length of the school year. Many of them have already increased the length of the senior year to eleven months and are adding two to four weeks to the schedule for the underclassmen.

Committees are examining the course content of the various subjects and are attempting to cut down duplication and repetition and to teach principles and fundamentals rather than mountains of facts. For example, the teaching of anatomy is changing—slowly enough in certain schools, but the change is coming about—from the study of dead tissue and a multitude of details to shorter courses with less stress on minutiae and more on function. Both anatomy and pathology are stressing the physiologic rather than the anatomic. The complaint of the medical student, "I have looked at and learned so many details in the upper extremity that I wouldn't know a whole arm if I saw one," is being answered constructively.

Coordination between the medical sciences and clinical subjects is helping to close the gap between the fundamental years and clinical experience. Planning successful coordination courses is difficult. It takes time and thought, the right kind of teacher, and the right kind of clinical material available for demonstration at the right time. Bringing the patient either in the flesh or in moving pictures to the pre-clinical student is not enough—the presentation must be made with such skill that the student is not so diverted by the new and dramatic that he forgets the application which the case illustrates. This takes much time on the part of both clinical and pre-clinical teacher.

In the third and fourth years there has been a great decrease in the amount of didactic teaching. The third year students are usually assigned to the wards and may study patients over a period of

Dr. Fay is Dean of the Woman's Medical College of Pennsylvania.

time. They take histories, do physical examinations, make tentative diagnoses, suggest therapy, and also study the home environment of the patient and the role of that environment in the production of disease. With a visiting nurse or social service worker they visit the home of the patient and try to suggest measures to prevent recurrence of the disease. Thus, an attempt is made to study the whole patient and to include both preventive medicine and public health in treatment.

The fourth year may include an in-service in medicine, surgery, and psychiatry, with instruction in the general and specialty clinics. Where the number of clinical instructors is large enough, the student can follow a patient through the various clinics and achieve as much continuity as with a patient in the ward. Continuity is valuable, but it takes a large amount of clinic material, a large staff of instructors, and good organization.

Besides these basic courses, provision must be made to train students for research and for teaching. Some schools find time in the roster for electives; others encourage students to act as teaching assistants in one of the medical sciences for a year before continuing with the work of the third year. A number of schools have funds for fellowships and teaching assistantships in order to encourage interested students after graduation.

Such a program is complex and expensive. The medical schools must be responsible for training medical scientists and teachers as well as practitioners. The building, equipping, and maintaining of a laboratory building for a modern medical school require large sums of money. The clinical laboratory—the hospital—is even more expensive. The careful study of a patient, the laboratory determinations, the diagnostic procedures, the special therapy which must accompany careful and sound teaching of medicine may add enormously to the cost of hospital care. The careful supervision of the student takes a great deal of time on the part of the instructor. No longer can the medical school rely wholly upon the volunteer clinical instructor to do all the clinical teaching. To find enough enthusiastic and able instructors and to find money enough to pay them—that is the problem that keeps the deans of medical schools awake at night and leads to the early retirement of many of them.

Since the cost of educating a medical student has increased sharply in the last decade, tuition fees have also increased. Despite this, tuition fees meet only a fourth to a third of the cost to the school. A number of medical schools are having difficult financial problems and are also being called on for many extra services in connection with civilian defense, community needs, and accelerated research programs. The requirements of the armed forces for doctors and nurses further accentuate the problems of personnel recruitment. It is no wonder that all sorts of plans to aid the medical schools have been widely discussed in Congress and by private individuals. Two years ago the National Fund for Medical Education was started to try to secure from private sources funds for the medical schools. From this fund the sum of $15,000 has been distributed to each of the 72 four-year schools, and $7,500 to each of the two-year schools. Physicians have been urged by the American Medical Association and by their own medical schools to contribute to such a fund.

To carry out the complex functions of the medical schools the thoughtful interest and the assistance of all citizens are urgently needed.

Role of the Student Health Service in a Medical College

June F. Klinghoffer, M.D.

THE PRIME PURPOSE of a Student Health Service is obviously the maintenance of optimal physical well-being of the student population. Such a service is vitally concerned with prophylactic or preventive medicine, the success of which can be tangibly expressed in the attainment of minimal absenteeism as well as minimal morbidity. It encounters, as do other branches of industrial medicine, its own specific problems in terms of the occupational hazards or exposures of the group serviced. Foremost of such problems in a medical school is tuberculosis control. Another perennial disease is infectious mononucleosis, which is increasing in frequency among hospital personnel, disturbing in its stubbornly slow and often bizarre course, and responsible for an amazing loss of student-hours.

Aside from the concrete medical care it provides, the Student Health Service can contribute in other ways to the general medical education of the students. First, it is the earliest contact with clinical medicine which the student encounters in her medical studies. As such, it should aim to be of the highest caliber from the standpoint of diagnostic studies, therapy, and patient-physician relationship. It is here, too, that many aspects of professional ethics may best be appreciated by the student.

Second, there are certain responsibilities to the faculty and administration that should be fulfilled. The school physician is often in the best position to recognize early evidence of emotional, as well as physical, strain or tension. She can thus contribute to the broad evaluation of a student in terms of character and personality.

Third, professional opportunity is afforded the physician to collect significant records and observations on those illnesses common to student groups. Student interest and cooperation in such research projects is usually extremely good. Participation in such studies, even though on a small scale, is a healthy stimulus to the student's investigative curiosity.

Dr. Klinghoffer is former Director of Student Health, Woman's Medical College.

The staff of the Student Health Service at the Woman's Medical College of Pennsylvania consists of two part-time physicians, one full-time graduate nurse (on a Fuld Foundation grant); and a secretary. Medical students, nursing students, and employees of both the College and the Hospital, totalling approximately 620 individuals, come under the care of the department. The general scope of activities is as follows:

Routine Examinations

Complete examinations are done on all medical and nursing students at the start of each school year. These include routine blood studies (hematocrit, hemoglobin, sedimentation rate, and serologic tests for syphilis), urinalysis, tuberculin testing, and chest roentgenogram. Freshman students, in addition, undergo gynecologic and ophthalmologic examinations. All food handlers are examined annually, and every employee has a chest roentgenogram. Follow-up examinations, as indicated, are performed throughout the year.

Consultation Services

When specialist care or evaluation is necessary, the various staff chiefs are called upon. These physicians give freely of their time and services.

Special Programs

The tuberculosis control program is a rigid one It is under the direct supervision of the Student Health physicians but is guided by the policies of the Tuberculosis Committee, which consists of five physicians who have special interest in tuberculosis and other diseases of the chest. Essentially, this program consists of chest roentgenograms at least three times throughout the school year, annual Mantoux testing of tuberculin-negative students until conversion to positive, and the increasing use of BCG vaccination of tuberculin-negative persons.

A dysmenorrhea study is being conducted by the Department of Gynecology, under whose direction various therapeutic procedures are carried through by the Student Health Service.

Allergy studies are performed where necessary by the Chief of Allergy, and desensitizations are then continued in the Student Health Service.

Incidental procedures are carried out according to circumstances. For example, mass vaccination with influenza virus vaccine was undertaken in January, 1951, because of the high incidence of influenza at the time.

Routine Visits

Close to 3,000 office visits were made during the school year 1950-51; of these 1,497 were made by medical students, 752 by nursing students, and 663 by employees.

Hospitilizations

Of the 87 hospitilizations, respiratory infections, including 18 cases of influenza, accounted for the greatest number. The second most frequent cause was infectious mononucleosis. Together, these accounted for 50 percent of the hospitalizations. Surgical procedures were performed 25 times.

Conclusion

The foregoing outline has been presented in order to give an indication of the wide scope of activities carried on under the auspices of the Student Health Service. It is obvious that there is close contact with the students. What should be equally obvious is the far cry between the modern health services and the "aspirin infirmaries" of old. The rewards for the physician in terms of medical experience and understanding of student problems are rich. Young physicians, especially in their early days of medical practice, would do well to consider more closely the opportunities available in student health work.

Medical Women in Foreign Missions

Edith F. Millican, M.D.

It has been characteristic both of women in missions and women in medicine to venture forth as pioneers, undaunted by the sneers or the doubts of a skeptical world. It was not to show that women can do the job as well as men, nor to display the ability of women to overcome seemingly impossible odds; it was simply the knowledge that there was a crying need, the conviction that it was God's will for them, and the faith that with God all things are possible, which led a succession of women beginning with Doctor Clara Swain to give their lives in service to the people of foreign lands.

As far as we are able to learn, women medical missionaries have gone from the United States to seventeen foreign countries. The largest number have gone to Asia. As Helen Montgomery has said in her comprehensive study book, *Western Women in Eastern Lands*, "Whether there were to be women physicians was a question of interest in America, but in Asia it was a question of life and death."

Dr. Millican was engaged in medical missionary service in China from 1943 until 1948. She is now with the Embudo Presbyterian Hospital, Embudo, New Mexico.

This point is well proved by the many vivid illustrations she reports from letters of those earliest missionaries, and it has been confirmed time and again in the experience of their successors.

Before the coming of the first missionaries, it was unheard of for a woman of India to be cared for by anyone other than ignorant midwives, and there were those who did not have even this questionable comfort. When a male physician, hearing the terrible screams of a woman coming from a wealthy home, offered his services, he was told that her husband would rather have her die than be attended by a man. It was this very attitude which brought the beloved Dr. Ida Scudder of India to her decision to become a physician and devote her life to that land. If you have not already, then do not fail to read the full account of her life as told so well by Mary P. Jeffrey in *Dr. Ida: India.*

Twenty years elapsed after American women first became aware of the terrible need of India's women before a missionary society was able to overcome the obstacles entailed in sending out a "medical lady." Clara Swain, of Castile, New York, had just graduated from the Woman's Medical College of Pennsylvania in 1869 when she was sought out and asked to go in answer to the urgent requests from India. In November of the same year, she sailed, under the

auspices of the Women's Foreign Missionary Society of the Methodist Church, thus becoming the first woman medical missionary in the world. This was twenty years after Dr. Elizabeth Blackwell, the first woman in the United States to graduate from a regular medical school, received her diploma. Immediately upon arrival in India, Dr. Swain opened a dispensary in Bareilly and began the training of sixteen young Indian women, thirteen of whom were certified to practice medicine at the end of three years. During her first six weeks, 108 patients came to her, and in her first year she prescribed for 1,200 at the dispensary and made 250 visits to homes of patients, in addition to calls to 16 different zenanas (the homes of the hidden wives of aristocratic Indian society).

The story of how Dr. Swain secured the property for opening the much needed hospital reads like a fairy tale. A piece of land perfect for the hospital lay adjacent to the mission property, but was owned by a Mohammedan prince known to be bitterly opposed to Christianity. He was the Nawab of Rampore and he had boasted at one time that no missionary should ever set foot in Rampore. When Dr. Swain, accompanied by two other missionaries, decided to set out for Rampore, forty miles away, word of their visit preceded them and, to their amazement, they were greeted by relays of horses and a fine coach and cavalry escort. Upon entering the city, they were taken to the house reserved for royal guests, where they were feasted and entertained magnificently. The prince was too busy with his prayers to meet them that night, but on the following day they were presented to him, compliments were exchanged, and Dr. Swain began to explain the purpose of their visit. The prince no sooner heard this than he smiled and said graciously, "Take it, take it. I give it to you with much pleasure for such a purpose!" Was there ever a more wonderful demonstration that God answers prayer? The astonished missionaries returned rejoicing to begin the work of repairing and remodelling the immense brick house and preparing the forty-two acre estate for its new mission, the first women's hospital in all India.

Five years of hard work made it necessary for Dr. Swain to take time off to rebuild her health which had suffered severely, but, at the end of four years she returned to India ready for whatever work needed her most and open to God's guidance. A year later, she received an invitation to attend the wife of the Rajah of Khetri and, after restoring the Rani to health, she was invited to remain at the palace.

CLARA SWAIN, M.D.
First Woman Medical Missionary

This she saw as another opportunity to enlarge the scope of medical and missionary work. With several co-workers she stayed there for seventeen years and opened a dispensary, while one of her companions organized a school. Thus another center of Christian service was begun through the work of Dr. Swain.

Not all the women who followed the call to foreign lands were allowed to put in a full lifetime of service or were given the joy of seeing the result of their labors come to full fruition as did Dr. Swain. Many equally devoted and earnest in their desire to carry out God's will had their work cut off in a few years' time and all too abruptly by ill health.

Some, much as Eleanor Chestnut, lost their lives through violence. After a determined struggle over many obstacles she had completed medical training at the Woman's Medical College in Chicago. Not satisfied with that, she also took a nurse's training course, then entered Moody Bible Institute to better prepare herself for mission work. In 1893, far better trained than many, she was accepted by the Presbyterian Board and sent to China. Her first term was one of difficulty and loneliness, but with faith and courage she worked to build up the little hospital at Linhsien.

Shortly after her first furlough the incident occurred which so abruptly ended her life. A mob stirred up by a misunderstanding during a native religious festival seized the mission and murdered the missionaries. It is told that they took Dr. Chestnut down the temple steps to the foot of a large tree. As she noticed a little boy in the crowd who had an ugly gash in his head, she called him to her, tore off the hem of her dress and bound up the wound. At this, they struck her and threw her into the river. What a waste, some may say, what a tragic waste of life and training! But that is not true, for there on those same grounds some years later a fine hospital, school, and church were established, a memorial to the fact that God's spirit had worked on, and the memory of those who were martyred there had been kept alive in the generation that followed.

There is one more of those early pioneers to whom I wish to pay tribute, not only because I myself have seen one of the results of her efforts, now known as the Hackett Medical Center in Canton, China, but also because, having spent a few years in mission hospital work, I know how completely one can be swamped by just the everyday routine of work. This woman, Dr. Mary Fulton, carried not only that full schedule, but also, in some remarkable way, built the David Gregg Hospital for Women and Children, opened the first medical school for women in China, maintained a Sunday School in her dispensary in a part of the city untouched by other Christian workers, and then translated into Chinese *Remarkable Answers to Prayer,* Holt's *Diseases of Children, Nursing in Abdominal Surgery,* Penrose's *Gynecology,* and Hopkins' *Roller Bandage.*

Dr. Fulton's early days in China make an interesting story in themselves, and sketchy bits we have make us wish for more detail. In October of 1884, the year after her graduation from the Woman's Medical College of Pennsylvania, she arrived in Hong Kong. By the following July she had been able to secure a little chapel where she could conduct a clinic. She was deluged with patients, and up to March of 1885 she had treated over 3,000. But in May of the following year she was forced to flee for her life; in doing so she lost all her drugs, instruments, books, and diplomas. Her letter home after this experience was characteristic: "We are cast down but not dismayed," she wrote.

Undiscouraged, she moved on to Canton and opened a dispensary there, the first step on the way to what was to become one of the finest hospitals in China. In March, 1891, she reported that they had treated over 63,000 patients and had performed 2,100 operations. In March, 1901, she was able to write that the dream for which she had prayed and worked for fifteen years was coming true. Money had been given for a hospital and medical college. "I couldn't find words in the English language to express my delight and gratitude," said she. But we must not forget how much is due the one who dreamed the dream and labored to make it come true!

The story of medical missions in the last few decades is generally one of progress toward higher standards of work and better equipment, with emphasis on the training of native workers and the establishment of more medical schools and centers. In many places it is also a story of work under strife and tension and under refugee conditions brought about by war. Wherever there are medical missions there are medical women. They may not be needed quite as much as women as in the days of Clara Swain. Nevertheless, they are shouldering their share of the great task of ministering to the physical and spiritual needs of the world, and through their efforts the forces for good, the forces for a better way of life, the forces for better international understanding are indeed being strengthened.

Bibliography

Dengel, Anna, Work of the Medical Mission Sisters in India, M. Woman's J., 49: 263-267, Sept. '42, and 52: 40-43, Nov. '45.

Floyd, Olive, Doctora in Mexico, New York, Putnam, 1949.

Gracey, (Mrs.) J. T. (Annie Ryder), Medical work of the Women's Foreign Missionary Society of the Methodist Episcopal Church, Danville, N. Y., Bunnel, 1881.

Griscom, Mary W., Medical women in China, M. Woman's J., 33: 226-230, Aug. '26.

Jeffery, Mary Pauline, Dr. Ida: India, New York, Fleming H. Revell Co., 1938.

Knapp, Sally, Women doctors today, New York, Crowell, 1947.

Montgomery, Helen Barnett, Western women in Eastern lands, New York, Macmillan, 1910.

Selmon, Bertha, History of women in medicine, M. Woman's J., 54: 51-57, Apr.; 40-42, May; 44-49, 57, June; 46-52, July; 43-46, Aug. '47.

The World Health Organization

CURRENT ACTIVITIES

AN INTERNATIONAL COURSE in nutrition was held in Calcutta, India, early in September as a joint project of the Government of India, the World Health Organization, and the Food and Agriculture Organization. The course was directed by Colonel C. K. Lakshmanan, Director of the All-India Institute of Hygiene and Public Health. Basic training in all aspects of nutrition was given by Indian and international nutrition experts. The course included classroom lectures and practical laboratory work at the All-India Institute and field experience in rural centers near Calcutta. The participation of FAO and WHO in the course was financed under the United Nations expanded program of technical assistance for economic development.

A medical teaching mission composed of 14 specialists from six different countries visited Israel and Iran under the auspices of WHO and the Unitarian Service Committee. It included a public health unit which remained in Israel for two months, while the clinical and pre-clinical specialists went to Iran for three weeks after spending a month in Israel. While WHO and the Unitarian Service Committee have sponsored similar projects in the past, including missions to Colombia, Finland, Germany, Greece, Japan, Poland, and the Philippines, this was the first one to go to the Eastern Mediterranean region and the first of such size and scope. In addition to the public health unit which was under the direction of Dr. Karl Evang, Surgeon General of Public Health of Norway, it included specialists in physiology, biochemistry, pathology, pediatrics, surgery, radiology, anesthesiology, preventive medicine, and sanitary engineering.

During a two-day briefing in Geneva the members of the mission were addressed by Dr. Brock Chisholm, Director-General of WHO. Stressing its importance, Dr. Chisholm said that a contact such as would take place in the Eastern Mediterranean besides having technical value also provides for a kind of cross-fertilization that could result in establishing closer ties over international boundaries.

The WHO's Consultative Committee for Europe, meeting in September, unanimously voted in favor of creating a European regional organization for WHO. As a result of the vote, the Committee reconstituted itself as WHO's Regional Committee of Europe and elected Dr. J. D. MacCormack (Ireland) as Chairman. It also decided to establish a temporary regional office in Geneva in place of the existing Special Office for Europe. Dr. Norman Begg was nominated as the first Regional Director for Europe. The following countries were represented at the meeting: Austria, Belgium, Denmark, France, German Federal Republic, Ireland, Italy, Luxembourg, Monaco, Netherlands, Norway, Portugal, Sweden, Switzerland, the United Kingdom, and Yugoslavia.

A mother brings her sick baby to a WHO Clinic in Kuching Sarawak. The infant mortality rate in this part of the world is very high.

WHO announced the opening of an International Anti-Tuberculosis Center in Bangkok. Dr. Marcel Mistal, a Swiss specialist in tuberculosis from Geneva, is now in Bangkok where he will join other international personnel already there. The new center is one of several such institutions designed to serve as demonstration training centers for all aspects of tuberculosis control. Such centers have been or are being established under the auspices of WHO in India, Turkey, Egypt, Pakistan, Burma, El Salvador, and Paraguay.

Experiment in World Friendship

Margaret Ray

ONE DAY during May, Los Angeles High School's fourth shipment of clothing, food, and school supplies to the Nikaia (Kokkinia) "Gymnasium" arrived at the Port of Piraeus, Greece. The next day Mrs. Eleni Dourou, head nurse of the American Women's Hospitals Polyclinic, in whose care the shipment was sent, and Mrs. Athanasia Theophilou, her friend and fellow-graduate of the American Women's Hospitals School of Nursing, went by bus to Piraeus to claim it. Unexpectedly, however, the customs officials were unusually particular, and for two weeks the two nurses labored with them before the goods were finally released. Then, because school was nearly ready to close, they and the other AWH Clinic nurses spent several days sorting and packaging the gifts for immediate distribution.

In a letter written to me in June Mrs. Dourou described the ceremony at the school and the speech of the doctor from the Polyclinic recounting the friendship between the students of Los Angeles and Nikaia. Evidently many prominent people were present to witness the distribution of the packages. Mrs. Dourou said that the ceremony reminded her of the "celebration" held in March by the school for me as the representative of Los Angeles High School.

This letter made me live over in memory my fabulous two weeks in Greece. When my mother, a teacher friend, and I planned our cruise, we wanted to follow civilization around the Mediterranean before our trip into Western Europe. We allotted a two weeks' stopover in Athens for two reasons: (1) We are all classicists at heart and were desirous of seeing the physical remains, and of feeling the on-the-spot impact of the civilization that has contributed so richly to our own, and (2) I wanted to meet in person the adults and children of modern Greece with whom I had had contact through Los Angeles High School's three-year friendship with Nikaia. I knew they were grateful for our small help, but I had no idea of the extent of their appreciation.

A report to the American Women's Hospitals, by Margaret Ray, member of the faculty of the Los Angeles High School, which has sponsored gifts of clothing and school supplies to the school children of Nikaia, Greece.

The bright Greek sun came streaming into our "Excambion" cabin on the morning of March 18; we wakened to the fascinating realization that we were about to step foot on Greek soil. At about eight o'clock, as we were nearly ready to emerge for breakfast, a knock on our door proved to be a welcoming delegation of seven from Nikaia: Mrs. Dourou; Mr. Albanis, the Mayor; his secretary, Mr. Amphilochiadis; two teachers, Miss Constantara and Mr. Thomaides; and two lovely girls from the school. The children presented a large bouquet of the fragrant spring flowers so abundant in Greece in March. On the pier, unable to procure passes to come on our ship, were Mrs. Theophilou, the two doctors, and two more nurses from the AWH Clinic. These good people had arisen at six o'clock and come by bus, breakfastless, to welcome us to their country!

Our dining room steward consented to have breakfast served to the whole party, and we ordered nearly everything on the menu. The pineapple juice made a special hit! In the lining of one of the children's coats thrown across a chair, we noted the label of a fashionable Los Angeles clothier. It made a lump come into our throats as we realized that one of our L.A. High girls had supplied warmth and a feeling of well-being for the beautiful Greek child who smiled her welcome.

After breakfast we were whisked through an otherwise tedious customs by our Greek friends and driven by taxi (only the Mayor had a private car—a '37 Chevrolet with a rumble seat!) to the Grande Bretagne Hotel. It turned out that Mr. Thomaides

Left, Girls of Los Angeles High School displaying gifts received from high school students of N'ka'a, Kokkinia, Greece. Right, The Mayor of Nikaia, customs officers, and an AWH nurse at the distribution of supplies from the high school students of Los Angeles, California.

is a great friend of the Hotel's manager, and, after some conversation between them, we were told that because we were "intellectuals" from the United States we were being assigned the suite prepared for Mr. Kirk, U. S. Ambassador to Russia, who was expected in Athens three days later. Until his arrival, we dwelt in state! From our balcony we looked down on Constitution Square and, in the other direction, up to the Acropolis, where gleaming in the sun, we saw the Parthenon, one of the sights we had come nearly half around the world to see.

Our Nikaia friends made a "program" for us, and, at great personal sacrifice, spent time, effort, and (I'm afraid) precious money to make us have a good time. Mr. Thomaides took us "walking" around Athens and later to his little apartment in Nea Smyrne for "hospitality." The warm-hearted, progressive, hospitable Mayor was the head of the party for our first trip to the Acropolis; he drove us to the incomparable Cape Sunium with its ruins of the magnificent temple to Poseidon, and he was the host for a perfect luncheon at the Piraeus Yacht Club on the day of the school's "celebration." Mrs. Theophilou came for us on various occasions and piloted us to our destination, besides serving us a delicious tea in her home. I think she was disappointed that she was not able to take us through her Municipal Hospital.

But, of course, it was Mrs. Dourou who took real charge of us. I cannot praise too highly this strong, efficient, courageous, generous Christian woman, whose whole thought seems to be for other people. She gives really too much, even beyond her strength, but this is the pattern of her life, and in it she finds satisfaction. She was indispensable as an interpreter, especially during several long talks I had with the Mayor concerning the needs of the school and the unlimited possibilities of a great high school in a democracy.

With Mrs. Dourou, I attended a meeting of Athens' nurses, many of whom were graduates of the American Women's Hospitals School of Nursing, and I was impressed with their business-like attitude, their friendliness and sincerity.

One morning we visited, first, Mrs. Dourou's little home in Nikaia (She had made a special cake for us that had to be baked in the town baker's oven.) and then the Clinic. We were told that in the three hours since opening they had treated 80 free patients. We Americans later agreed that we had never seen a more forlorn and needy group of people than those waiting in line to be helped by the kindly nurses and doctors of the AWH Clinic.

We had some other contacts in Athens through which we saw other sides of modern Greek life. A trip to Epidaurus in the Peloponnesus gave us a view of the lovely countryside in the spring and an idea of the beauty and completeness of ancient Greece's most famous health resort. The celebration of Greek Independence Day on March 25 presented a brave army ready again to defend their country against all invaders.

Perhaps the climax of our fortnight's stay was the school's "celebration" in honor of Los Angeles

High School's representatives. When we arrived about three in the afternoon, we found the 1400 students standing, boys and girls separate, in two solid groups, before an unfinished building, the porch of which had been converted into a kind of platform. The cheers of those children brought tears to our eyes so that we were scarcely able to smile our appreciation.

The ceremony and program that followed included presentation of more flowers, my greetings from Los Angeles (interpreted by Mr. Thomaides), speeches by various notables, including representatives of the Ministry of Education and the Orthodox Church, presentation of a hundred pieces of handwork for our school, and a gold medal to me from the parents and teachers. Folk dances by some of the girls, choral music, and a recitation or two were followed by the band's playing of first the Greek anthem and then the Star Spangled Banner. Again I could hardly restrain the tears, as I watched 1400 Greek children stand at attention during the playing of our national anthem. The next morning we were surprised to see our faces peering from the pages of several Athens newspapers.

A few days later, when we had to say farewell to Greece, our adult friends came to the ship as we expected. But, to our surprise, a score of students came also, again bearing flowers and gifts. They weren't allowed on our ship, but managed to board a nearby barge on which they waited for our ship to leave. Our last impression of Greece was of those children, waving and calling "bon voyage," until the barge was a mere speck and Piraeus receded into the general landscape of Attica.

Perhaps you wonder why I've written in such detail about incidents that have no seemingly direct connection with the American Women's Hospitals. But all of this experiment in world friendship stems from the fact that when, late in 1946, I wrote Dr. Lovejoy about Los Angeles High's desire to "adopt" needy children in Kokkinia and send the gifts through the AWH Clinic there, she responded with such enthusiasm and such practical help that our first "drive" gathered enough momentum in the school to make the "adoption" an accepted fact in Los Angeles High School life, even though now we have a whole new generation at the school. Our Trophy Room has a special case for the dolls, vases, and handwork sent from Nikaia; and every term, explanation of these gifts and our Greek work is a part of the new students' orientation.

Of course, many schools now, through UNESCO, have contact with European schools, but our experiment was made possible long before, by the cooperation of the American Women's Hospitals in New York and their tireless, faithful, patriotic workers in Nikaia.

WHO FELLOWSHIPS FOR STUDY ABROAD

The World Health Organization is offering 10 to 14 fellowships to the United States for foreign study during 1952 in the field of health. The Fellowship Selection Board, established by Surgeon General Leonard Scheele, consists of Dr. Joseph W. Mountin, U. S. Public Health Service; Dr. Leona Baumgartner, New York, American Public Health Association; and Dr. Walter A. Bloedorn, Washington, D. C., Association of American Medical Colleges. Applications will be considered in various branches of public health or such allied fields as medical or nursing education. Applicants must be engaged in full-time public health or educational work. Knowledge of the language of the country to be visited is necessary. Nonfederal workers will be given preference. To date, grants have not been given for research activities alone. All grants given in the past have been for two or three month periods. The World Health Organization provides transportation to and in the country visited, with a stipend of from $160 to $300 a month. Application blanks may be obtained from the Division of International Health, U. S. Public Health Service, Washington, D. C., and must be filed in triplicate by January 1, 1952.

Journal of the
AMERICAN MEDICAL WOMEN'S ASSOCIATION

ASSOCIATION NEWS AND ANNOUNCEMENTS

MESSAGE FROM THE PRESIDENT

THIS ISSUE of the JOURNAL increases our pride in the Woman's Medical College of Pennsylvania. Those of us who are graduates from other schools join with the alumnae in applauding her achievements. The college has come a long way since its first classes were held in a small building "in the rear of 627 Arch Street, Philadelphia." It has come to have a unique and important place in the medical education of this country. Naturally, it will always be of particular interest to the American Medical Women's Association.

Some years ago, Dr. Bertha Van Hoosen suggested and started a campaign for funds to erect a building on the campus of the Woman's Medical College. This would be not only a memorial to those pioneer medical women to whom we are indebted, but would also have practical value. The plan was that it should house the college library, historical data pertaining to medical women, and an auditorium. This project has been carried on through the efforts of Dr. Van Hoosen and her committee. The goal is now in sight. The need for the library is real. The college, together with other medical schools, requires room for expansion and funds are more and more difficult to secure. The completion of the building will give some of the needed space, and will give us the satisfaction of having finished a worthwhile enterprise. Shall we do it now? Why not this year instead of next? Why not now when the need is real? Will those of you who have ideas as to ways of raising the balance of this money please write to Dr. Van Hoosen or to me? Maybe some of you will volunteer to join the committee. Maybe some of you will send a contribution or add to the one you have already made. If we all work hard enough, the funds for this building can be in hand by the June meeting. Let's try!

* * *

Merry Christmas to each of you! May the New Year see your most cherished dreams fulfilled.

Amey Chappell

WE WELCOME THESE NEW MEMBERS

California

Golda Fischer, M.D.—1654 University Ave., Berkeley. *S.C. 1, 1943. Pd**

Delaware

Margaret S. Richey, M.D.—35 West Fifth St., New Castle. *Pa. 7, 1923.*

Illinois

Jeanne Kehoe Mercer, M.D.—1011 Lake St., Oak Park. *Ill. 11, 1947. Pd*

Beatrice Anne T. Raymond, M.D.—1441 West 18th St., Chicago. *Ill. 6, 1933.*

Ella E. Deutsch, M.D.—3202 Broadway, Chicago, *Aus. 7, 1924. I*

Bertha Gae Fisher, M.D.—732 No. Austin Blvd., Oak Park. *Ill. 43, 1918.*

Indiana

Naomi L. Dalton, M.D.—925 Atwater St., Bloomington. *Ind. 20, 1937. Anes*

Alice Hall-Davis, M.D.—5116 Hohman Ave., Hammond. *Md. 1, 1911.*

*See A.M.W.A. Yearbook, page 25, or A.M.A. Directory, for explanation of code used in this listing.

Kansas

Katherine Pennington, M.D.—910 Schwerter Bldg., Wichita. *Kan. 2, 1943. Pd.*

Kentucky

Cora Davis Kingston, M.D.—1028 Rose Circle, Covington. *O. 41, 1907.*

Massachusetts

Mona C. Mehan, M.D.—36 Frothingham St., Lowell. *Pa. 7, 1936. R*

Sallie Harding Saunders, M.D.—32 Woodside Park, Winthrop. *Mass. 7, 1919.*

Lucile Williamson, M.D.—399 Beacon St., Boston. *Calif. 11, 1922. Pd*

Michigan

Edith Slipson Norcott, M.D.—8909 E. Jefferson Ave., Detroit. *Mich. 1, 1931.*

Rose Marie Pink, M.D.—12645 Wilshire, Detroit. *Pa. 7, 1933.*

Missouri

Mildred Carolyn Duer, M.D.—300 West 47th St., Kansas City. *Pa. 7, 1934. Pd*

(Continued on page 486)

OPPORTUNITIES FOR MEDICAL WOMEN

At the present time the Committee on Opportunities for Medical Women finds no further need to search out and publish lists of internships and residencies. This is done in a comprehensive manner in the *Journal of the American Medical Association.* This year the number of vacant residencies rose to 4,869 unfilled, which puts the pressure on the hospitals instead of upon the young doctor.

It seems, therefore, more appropriate to seek out new ways to aid our members. Efforts will be directed toward publicizing opportunities for four groups, namely: (1) our Junior Branch members who wish summer employment in the field of medicine; (2) married women doctors who are raising families, but who do not wish to lose their skills, and desire part-time employment; (3) those women, out in general practice for a few years, who could be encouraged to return to hospital residencies in preparation for Specialty Board examination (As a service to our women's hospitals a listing of their available residencies will be published in the near future); and (4) retired or semi-retired women who wish to aid in the defense effort.

Another project will be the listing of communities in urgent need of new doctors because of their rapid growth and the development of increased hospital facilities.

It is our earnest desire that members who are aware of any of these opportunities communicate with the committee in order that we may publish them. The mere listing of our committee goals will not produce results. The cooperative efforts of our entire membership can help to fulfill these aims.

DOROTHY W. ATKINSON, M.D., *Chairman*
Committee on Opportunities for Medical Women

UNITED STATES AIR FORCE

Men and women practitioners in the medical profession and specialized vocations allied to medicine and surgery now have an opportunity to step directly from civil life into the ranks of commissioned officers in the United States Air Force, according to an announcement released by Lt. Colonel Charles D. Morat, Jr., Director of Personnel Procurement at headquarters of the First Air Force, Mitchel Air Force Base, N.Y.

The classifications from which officers are sought by the Air Force are: doctors of medicine, medical research and allied science specialists, physical and occupational therapists, medical supply and administration specialists, environmental and industrial hygiene engineering specialists, dietitians and nurses.

In each category, a definite set of educational and qualifying experience standards are required, with increasing professional attainment minima for progressively higher ranks. In all cases, degrees must have been granted by colleges and institutions acceptable to the surgeon general of the U.S. Air Force. For women, an age limit of 45 years has been established. While the commissions offered under this program are in the U.S. Air Reserve, applicants must be ready to be called to active duty at the discretion of the Air Force.

Because each classification has its own set of requirements for each grade from second lieutenant to the higher ranks, the First Air Force has set up clerical facilities for prompt servicing of all inquiries regarding these commissions. Men and women who are interested in any of the specified professions are invited to write to the Air Surgeon, Headquarters First Air Force, Mitchel Air Force Base, New York.

GENERAL PRACTICE

An excellent opportunity is open for one or more women doctors interested in general practice, in Bedford, Ohio, a town of eleven hundred population. There is a municipal hospital with 54 beds. In 1951 there were only four doctors to serve the community. Further details may be obtained by writing: Edith Petrie Brown, M.D., 83 Woodrow Avenue, Bedford, Ohio.

NEW MEMBERS

(Continued from page 485)

New York

Frances E. Vosburgh, M.D.—891 Madison Ave., Albany. *N.Y. 20, 1925.*

Kathryn Giblin Jacobs, M.D.—281 Avenue C. New York. *N.Y. 19, 1948. Pd*

Helen M. Wallace, M.D.—125 Worth St., New York. *N.Y. 1, 1945. Pd*

Pennsylvania

M. Agnes Gowdy, M.D.—1214 65th Ave., Philadelphia. *Pa. 7, 1935.*

Oklahoma

Elnora G. Miller, M.D.—527 McBirney Bldg., Tulsa. *Okla. 1, 1946.*

South Dakota

Edith A. Burns, M.D.—2001 S. Grange, Sioux Falls. *Calif. 12, 1945.*

Virginia

Nancy B. King, M.D.—3 W. Williamsburg Rd. Sandston.

Wisconsin

Lucille M. Radke, M.D.—Barron. *Pa. 7, 1940.*

UNIVERSITY LECTURING AND POST DOCTORAL RESEARCH AWARDS UNDER THE FULBRIGHT ACT

Europe and the Near East for 1952-1953

Anesthetics

1. Anesthetics in childbirth, Visiting Lecturer (English), University of Bergen, Bergen, Norway.
2. Anesthetics and Post Anesthetic Reanimation, Visiting Lecturer (French), one semester each at University of Toulouse and University of Montpellier, France.
3. Anesthesia, Lecturer or Research Scholar (German), University of Graz, Austria.
4. Anesthesiology, Visiting Lecturer (English), Tehran University, Iran.

Bacteriology

1. Research Scholar: (a) Royal College of Malta; (b) University of Hongkong; (c) University of Malaya; (d) University College, Nigeria; (e) University College of the West Indies; (f) Makerere College, Uganda; (g) Yellow Fever Institute, Uganda.
2. Visiting Lecturer (English), Tehran University, Iran.

Biochemistry

Research Scholar (see under Bacteriology 1).

Cancer Research

Research Scholar, University of Milan and Instituto Regina Elena for the Study and Treatment of Cancer, Rome.

Cerebral Palsy

Research Scholar, University of Oslo, Medical Faculty, Norway.

Endocrinology

Lecturer or Research Scholar (German), University of Innsbruck, Austria.

Hematology

Research Scholar, University of Oslo, Medical Faculty, Norway.

Hygiene

1. Industrial Hygiene, Visiting Lecturer (English), Queen's College, Belfast.
2. Hygiene, Visiting Lecturer (Italian), University of Milan, Italy.
3. Hygiene and Preventive Medicine, Visiting Lecturer (English), Fouad 1 University, Egypt.

Neuro-Anatomy

Research Scholar, University of Oslo, Medical Faculty, Norway.

Neuro-Surgery

Lecturer or Research Scholar (German), University of Innsbruck, Austria.

Ophthalmology

Lecturer or Research Scholar (English or German), University of Graz, Austria.

Parasitology

1. Research Scholar (see under Bacteriology 1).
2. Visiting Lecturer (English), Fouad 1 Research Institute and Hospital for Tropical Diseases, Cairo.

Pathology

1. Research Scholar (see under Bacteriology 1).
2. Visiting Lecturer (Italian), University of Milan, Italy.
3. Visiting Lecturer (English), Tehran University, Iran.

Physiology

1. Research Scholar (see under Bacteriology 1).
2. Visiting Lecturer (Italian), University of Milan, Italy.
3. Visiting Lecturer (English), Tehran University, Iran.

Psychotherapy

Lecturer or Research Scholar (English or German), University of Innsbruck, Austria.

Surgical Pathophysiology

Research Scholar, University of Oslo, Medical Faculty, Norway.

Surgery

1. Radiologist or Radio Isotope Expert. Lecturer or Research Scholar (German), University of Innsbruck, Austria.
2. Radio Isotope Research Scholar, University of Milan, Italy.

Tropical Medicine

Research Scholar (see under Bacteriology 1).

Virology

1. Research Scholar (see under Bacteriology 1).
2. Visiting Lecturer (English), Fouad 1 Research Institute and Hospital for Tropical Diseases, Cairo.

Further information may be obtained by writing to: The Executive Secretary, Conference Board of Associated Research Councils, Committee on International Exchange of Persons, 2101 Constitution Ave., Washington 6, D.C.

News of Women in Medicine

Three women, each of whom has practiced medicine for more than fifty years, were among the six physicians announced as winners of the 1951 Lasker Awards of the American Public Health Association. Dr. Florence R. Sabin of Denver, Colorado, has the distinction of having crowded three distinguished careers into one lifetime: first, her career as Professor of Histology at Johns Hopkins; second her significant research at the Rockefeller Institute, particularly in cytology, which led to important discoveries as to cellular responses; third, her achievement in the field of public health administration. This third career Dr. Sabin began at the age of 73, as a member of the state's post-war planning committee and Manager of Health for Denver, by drafting a modern health program for Colorado. It was for this third career that Dr. Sabin received the Lasker Award, "for outstanding accomplishments in public health administration."

FLORENCE R. SABIN, M.D.

ELISE S. L'ESPERANCE, M.D.

Joint awards for linking preventive medicine to cancer control were bestowed on Dr. Elise Strang L'Esperance, founder of the Strang Clinics in New York, and Dr. Catharine Macfarlane, professor at Woman's Medical College of Pennsylvania. They were cited for their "inspiring application of preventive medicine to cancer control." Dr. L'Esperance and Dr. Macfarlane envisioned the control of cancer by regular physical examinations of presumably healthy people for the detection of early cancer or precancerous lesions. Dr. L'Esperance established the original Strang Clinic in 1937. Through her efforts, her clinics today offer service, training for young physicians, and research to facilitate early diagnosis and prevention. Her principle of mass-scale health screening and education has also reached out to discover early manifestation of other diseases. In 1938 Dr. Macfarlane undertook a similar program. She organized the first cancer control prevention clinic in Pennsylvania to determine the value of periodic partial examinations in detecting cancer of the breast and uterus in an early and curable stage and in detecting lesions which may predispose to cancer. Today in the United States there are 251 cancer detection clinics patterned after these pilot establishments.

CATHARINE MACFARLANE, M.D.

During the past summer Dr. Elizabeth Gist Dozier, San Fernando, California, visited the overseas clubs of Zonta International, of which she is president (1950-52), studying the status of women. Zonta International is a classified service organization of executive and professional women and has approximately ten thousand members in 11 countries. She also visited a number of nursing homes and hospitals in Switzerland, France, Germany, and Finland. Dr. Dozier received her medical degree from the University of Illinois College of Medicine in 1928, and for the past 21 years has been a school physician in the Los Angeles city schools. She is a charter member of the American Academy of General Practice.

ELIZABETH GIST DOZIER, M.D.

Dr. Mary E. Mercer, New York, a pediatrician at Cornell University Medical College and New York Hospital, has been appointed a member of the New York State Mental Hygiene Council by Governor Dewey.

Two fellowships have been given to the Woman's Medical College of Pennsylvania for the ensuing year: one from the Alpha Xi Delta Fraternity for $1,500, awarded to Dr. Eloise M. Lemon, Fellow in Oncology, for the continuation of her work in the home care of indigent cancer patients; another from the American Federation of Soroptomist Clubs for $1,000, awarded to Dr. Phiroza Davar of Bombay, India. At present Dr. Davar is a fellow in anatomy at the Woman's Medical College, and she hopes to use part of her award to finance six months of research in the public health fields of America before returning to India next year.

A Conference on Women in the Defense Decade was held in New York on September 27 and 28. On the executive committee were Dr. Margaret Bell, Professor of Hygiene and Physical Education, University of Michigan; Dr. Dorothy B. Ferebee, acting director, University Health Center, Howard University; and Dr. Connie M. Guion, Professor of Clinical Medicine, Cornell University College of Medicine. One of the panel consultants on "The Home: the Source of the Nation's Strength" was Dr. Leona Baumgartner, New York. Dr. Ferebee was chairman of the Health and Welfare Section, and Dr. Amey Chappell was one of the panel consultants. Dr. Margaret D. Craighill discussed "Service Life: New Problems, Different Solutions," and Major Ruth E. Church, M.C., USA, Assistant Chief, Civil Public Health Branch, Office of the Surgeon General, Department of the Army, was a panel consultant on this topic.

Twenty-five Soroptimist Fellowships have been awarded to 24 women and one man for advanced study in their specialties since the first fellowship was set up in 1946. The program promotes creative scholarship, advancement of women, and furtherance of international understanding, and many women doctors have received fellowships. Dr. Dora Papara, Greece, was the winner of the American Federation's first $3,000 international fellowship. She attended the Universities of Athens and Vienna, served various mental institutions in Greece as a psychiatrist, and came to the University of Pennsylvania for further study in the fields of neurology and psychiatry. Dr. Alma Dea Morani received the first (1946-1947) regional fellowship, which was also the first fellowship in plastic surgery ever granted a woman on this continent. She used the $1,500 award for advanced study at the Washington University Hospital in St. Louis, and returned to Philadelphia to continue her career as a plastic surgeon. Dr. Mary M. Price, a graduate of Indiana University, School of Medicine, received a $1,500 fellowship, which she used for advanced study in obstetrics. Dr. Aenid Jones, who spent four years overseas as a nurse during World War II and upon her return took up the study of medicine at McGill University, is using her fellowship award for advanced work in gynecology and obstetrics at the Royal Victoria Hospital, Montreal.

Dr. Madge C. L. McGuinness and Dr. Elaine Ralli have been elected delegates from the Medical Society of the County of New York to the Medical Society of the State of New York for a term of two years.

Dr. Esther L. Richards, Baltimore, Maryland, is a member of the advisory council of the Woods Schools, Langhorne, Pennsylvania. Recently the Research Clinic of the Woods School published a report of a press conference, sponsored by the schools, at which some of the latest developments of medicine in the care and treatment of the mentally and physically defective child were summarized. Dr. Sibylle Escalona, Menninger Foundation, was one of the panel members.

Dr. Margaret T. Hayes, the first physician to become a Religious of the Sacred Heart of Jesus, received the degree of doctor of medicine in 1949 from the New York University College of Medicine, interned at Kings County Hospital, Brooklyn, and more recently was assistant resident on the Pediatric Service.

At a meeting of the school physicians of the City of New York, Dr. Leona Baumgartner, Assistant Commissioner of Health, instructed the group to give special emphasis to overcoming the problems of the emotionally disturbed child. She said that school physicians must aim at finding the first signs of emotional ill health so as to prevent "slight, easily handled problems from growing up into big and difficult problems."

The National Institute of Arthritis and Metabolic Diseases recently awarded 24 grants. These are among the first to be awarded by the Institute, which was established by Congress last year, as one of the National Institutes of Health. Dr. Grace A. Goldsmith, Tulane University, was awarded $30,132 for research on the B group of vitamins in human nutrition. Dr. Pauline B. Mack, Pennsylvania State College, was awarded $12,096 for the study of skeletal growth, maturation, and mineralization of children representing a wide range of nutritional status.

Dr. Martha M. Eliot, newly appointed Chief of the Children's Bureau, Federal Security Agency, addressed the 37th annual convention of Hadassah, the women's Zionist organization in America. Dr. Eliot declared that meeting the needs of children in this period of national and international tension was "as important for the future of the country as meeting our defense needs." Dr. Eliot, making her first public address as head of the Children's Bureau, underscored three of the points in her nine point program for the proper care of children, saying that her bureau must take the lead among child welfare agencies. The three points were: the development of more effective programs for the prevention of juvenile delinquency; day care centers for children of mothers working in defense programs; and broad extension of private and federal health and medical services for the care of children.

Dr. Janet Travell, Cornell University Medical College, has been awarded $6,000 by the Heart Institute of the Public Health Service, for studies on painful disorders of skeletal muscle resulting from coronary thrombosis and other conditions.

Dr. Betty Huse, pediatric specialist, Children's Bureau of the Federal Security Agency, advised that child victims of rheumatic fever should be sent to a hospital or convalescent home for care only if treatment at home is impossible. Urging parents and professional workers to deal carefully with the emotional factors involved in the treatment of rheumatic fever, Dr. Huse said that separation from parents might be so great a shock to a pre-school child as "seriously to interfere with his ability to form emotional relationships with people later."

Dr. Padma Raj, L.R.C.P. (London), M.R.C.S. (England), M.R.C.O.G. (London), is visiting obstetrics and gynecology clinics in New York, Chicago, Washington, Baltimore and San Francisco. Dr. Raj is medical superintendent of the Daga Memorial Hospital in Nagpu, India, and secretary of the central group of the Medical Women's Indian Association.

A few weeks ago a 25 year old Greek ex-soldier arrived in New York, his main purpose being to thank the doctor who had given him a "new face." While fighting in the mountains near the Bulgarian frontier, the young Greek soldier caught a "burst" in the face. Efforts to erase his disfigurement were unavailing. While he was still in an army hospital near Athens, a visiting American specialist, Dr. Genia Sakin, New York, volunteered her services to the Greek government, and was assigned to the Athens Hospital, where the Greek soldier became one of her patients. After five operations in three months, during which she handled many other cases, Dr. Sakin completed her treatment of this soldier. She had intended to remain in Greece only a month or two—she stayed nearly a year. She has received the personal regard of Queen Frederika and was decorated by King Paul. The chief of the United States Military Mission, General James A. Van Fleet, added his thanks. But to Dr. Sakin the most rewarding "thank you" was the unexpected visit from her Greek ex-soldier.

Marcelle Bernard, M.D., *News Editor*
635 East 211 St., New York 67, N. Y.

NEWS FROM THE BRANCHES

Branch Eleven, Cincinnati, Ohio

A meeting of the Cincinnati Medical Women's Club was held at the home of Dr. Esther Marting on Tuesday, September 25. The topic of discussion, presented by Dr. Marting, was "Cancer of the Skin."

Branch Fourteen, New York,

The Women's Medical Association of New York City held its annual fall dinner meeting on October 3, 1951. The subject for discussion was, "The Volunteer Worker and the Hospital: A Means of Improving Patient Care." Dr. Connie Guion, Professor of Clinical Medicine at Cornell University Medical College, compared the early work of volunteers in the hospitals before World War I, when they were poorly trained and unreliable, with the present day volunteer workers who are well trained and much more reliable. She voiced appreciation to the volunteers without whose aid hospitals and their medical care would suffer, urging that, because of the critical shortage of nurses, the volunteer organizations recruit more workers. She closed with the admonition that the success of the work of volunteers depends upon their training, their sense of responsibility, and the appreciation they receive in return for their efforts.

Miss Louise Campbell, Executive Secretary of the New York Hospital Visiting Committee of the State Charities Aid Association, told of the personal satisfaction gained by the volunteer from his or her service to the hospitals, but said it was difficult to obtain volunteers who would be reliable as to time of service. The volunteers do a great deal in the rehabilitation centers. They make holiday times more happy for patients, and also handle inquiries of patients, families, and visitors, thus relieving nurses for more technical work.

Dr. Elaine Ralli opened the discussion, stressing the nurse shortage, the drastic need for more volunteers and for a stepped up program of training.

Officers of volunteer organizations present who joined in the discussion were: Mrs. Byron Stookey, Chairman of Auxiliary Committee, United Hospital Fund; Mrs. Norman Forster, Vice President, New York Junior League; Mrs. Treherne Thomas, Director of Volunteers, New York Hospital; Mrs. C. Maury Jones, Vice Chairman of Volunteers, American Red Cross; Mrs. Elon B. Adsit, Director of Volunteers, Presbyterian Hospital; Mrs. Florence Ritner, Social Service Department, Bellevue Hospital; and Mrs. George Perera, Chairman of Volunteers, Presbyterian Hospital.

THESE WERE THE FIRST

Dr. Emily Dunning Barringer was the first woman ambulance surgeon in New York, and the first woman to receive a diploma for an internship at Bellevue Hospital. Many decorations have been awarded to her and she is known as an author and as a fighter for reforms and for the advancement of women in medicine. She was president of the American Medical Women's Association in 1941-1942.

Dr. Dorothy Armstrong Elias was the first woman doctor in the U. S. Air Force Medical Corps, holding a captain's commission. She was graduated from Duke University School of Medicine in 1946.

Dr. Sheldon Amos Elgood, a graduate of the University of London, Faculty of Medicine, 1900, was the first woman physician in the service of the Egyptian Government, being assigned to the International Quarantine Board of that country, where she served for 22 years. She received many decorations including the Decoration of The Nile.

Dr. Ellen C. Potter was appointed in 1923 as Commissioner of Public Welfare in Pennsylvania, the first time a woman was placed in the Cabinet of that State. She was graduated in 1903 from the Woman's Medical College of Pennsylvania, where she later taught, and was a strong advocate of social welfare. She was president of the American Medical Women's Association, 1929-1930.

Dr. Margaret P. H. Bowden (died 1940) was one of the first two women to complete a four-year course at the Tulane University of Louisiana School of Medicine and, with Dr. Aldea Maher, the first to intern at Charity Hospital in New Orleans. She taught pathology and bacteriology at Tulane and served on the staff of an emergency hospital during World War I.

Trotula De Ruggiero Platerius is the first distinguished medical woman of the eleventh century of whom we have record. She taught at Europe's first medical school in the University of Salerno, was a recognized authority and writer on gynecology and obstetrics, the wife of a physician, and the mother of two physicians. For 400 years her voluminous writings were quoted.

Dr. Maria Theresa Cerrari De Guardino was appointed (1922) to the Chair of Gynecology at the University of Buenos Aires, the first time in a Latin-American school that a woman physician was so honored. Elizabeth Bass, M.D.

BOOK NOTICES

(Editor's Note:—These reviews represent the individual opinions of the reviewers and not necessarily those of the members of the Editorial Board of the JOURNAL.)

CLINICAL HEART DISEASE. By Samuel A. Levine, M.D., F.A.C.P., Clinical Professor of Medicine, Harvard Medical School; Physician, Peter Bent Brigham Hospital, Boston; Consultant Cardiologist, Newton-Wellesley Hospital; Physician, N. E. Baptist Hospital. Fourth Edition. 556 pages, 192 figures. Price $7.75. W. B. Saunders Company, Philadelphia and London, 1951.

This is the fourth edition of a book which first appeared about 15 years ago. Its purpose at that time, as stated in the preface to the first edition, was "to present in simple form the important aspects of the diagnosis, prognosis, and treatment of heart disease," and the text was written primarily for the general practitioner. Each succeeding edition has brought up to date the progress made in these aspects of heart disease. The present edition evaluates the many recent advances in this field such as the importance of anticoagulant therapy in the treatment of coronary disease and of antibiotics in the therapy of rheumatoid heart disease and bacterial infections of the heart. The chapters on electrocardiography have been considerably revised and edited by Dr. Harold D. Levine.

This fourth edition maintains the high standard of its predecessors as a most valuable guide to the general practitioner in the management of heart disease.

—Ada Chree Reid, M.D.

A TEXTBOOK OF PATHOLOGY. Pathologic Anatomy in Relation to the Causes, Pathogenesis, and Clinical Manifestations of Disease. By Robert Allan Moore, Edward Mallinckrodt Professor of Pathology, Washington University School of Medicine, St. Louis. Second Edition. Pp. 1,048, with 501 figures. Price, $12.50. W. B. Saunders Company, Philadelphia and London, 1951.

This second edition of an excellent textbook of pathology shows revision and improvement by some additions and deletions. In some instances the subjects have been correlated so that the material is presented more clearly and succinctly than in the original edition, which appeared in 1946. This correlation makes the book more satisfactory, both for reading and for study, to the student of pathology or the clinician.

The text is arranged in seven parts, preceded by a brief chapter on the History and Scope of Pathology. Then follows Part I, General Pathology, under which heading are discussed the disturbances in the metabolisms, the growth of cells, inflammation, repair, and healing of tissues, with two chapters on the general pathology of tumors and the pathology of special types of tumors.

Part II, Diseases caused by Living Agents, takes up infectious diseases in general, diseases whose portal of entry is through the skin; exogenous or hematogenous routes of infection; diseases in which the alimentary canal is the portal of entry; venereal diseases, and so forth.

Part III covers the diseases caused by physical agents, such as trauma, changes in atmospheric pressure, and radiant energy; Part IV, those caused by chemical agents, hay fever, asthma, collagen diseases, and pneumoconiosis, and diseases caused by gases, plant contacts, and organic and inorganic substances; Part V, diseases caused by vitamin and specific deficiencies; and Part VI, diseases of pregnancy and of the extremes of life. Part VII, nearly one half of the book, covers diseases of unknown or obscure cause—systemic pathology.

The text is profusely illustrated with photographs, photomicrographs, radiographs, diagrams, and drawings, and all are well arranged to elucidate the text and fix the facts in the mind of the reader. Each chapter has an appended list of references, papers, books, and so forth, by established authorities on the various subjects, which will be valuable to the student who wishes to broaden his knowledge or to be guided in further research. The index is complete and will afford a means of ready reference.

All in all this is a monumental work, covering over a thousand pages of text written with understanding of a student's need as a teacher knows it. By the lucidity of his prose and his command of English, the author demonstrates his ability both as a writer and as a pathologist, and he has covered the entire field of pathologic anatomy in a way to hold the interest of the seeker for information. The fact that this second edition has been necessary only six years after the first edition appeared is another fact which attests to the high quality of the book. A student who pursues his study with conscientious persistence throughout the volume will have a basic knowledge on which to build his professional career and, if such is his ambition, will be well started on his way to become a qualified pathologist.

—C. H. Connor, M.D.

NEW AND NONOFFICIAL REMEDIES, 1951. Issued under the direction and supervision of the Council on Pharmacy and Chemistry, American Medical Association. 782 pages. Price, $3.00. J. B. Lippincott Company, Philadelphia, London, Montreal, 1951.

This is the current number of the series published annually under the supervision of the Council on Pharmacy and Chemistry of the American Medical Association. It is the official listing of those therapeutic products which have been submitted to the Council and have been approved after careful consideration. The carefulness is attested to by the statement in the preface that "the Council has adopted the broad general principle that a 20 year inclusion in New and Nonofficial Remedies is necessary" in order to establish the therapeutic worth of an article.

As in previous editions, the present volume is divided into two main parts: "Section A, with general statements on broad classifications of preparations, and monographs describing the actions, usage, and dosage of specific articles; Section B, with physical descriptions, tests, and standards for Council accepted drugs for which official standards are not available." The book in this edition as in those preceding it is extremely valuable for reference, and is a "must have" for anyone in any way connected with the prescribing, dispensing, or administering of therapeutic products.

—Ada Chree Reid, M.D.

A DOCTOR'S PILGRIMAGE: An Autobiography. By Edmund A. Brasset, M.D. Pp. 256. Price, $3.50. J. B. Lippincott Company, Philadelphia, 1951.

One doctor's experience in general practice in small towns in Nova Scotia is portrayed. His reasons for his decision to devote himself to such practice and to abandon his early ambition to become a brain surgeon are described in an interesting though somewhat detailed manner.

—Susan Wood

SPATIAL VECTOR ELECTROCARDIOGRAPHY: CLINICAL ELECTROCARDIOGRAPHIC INTERPRETATION. By Robert P. Grant, M.D., National Heart Institute, Bethesda, Md., and E. Harvey Estes, Jr., M.D., U. S. Naval Hospital, Bethesda, Md. 149 pages, 41 figures. Price, $4.50. The Blakiston Company, Philadelphia, New York, Toronto, 1951.

The purpose of this text is to present to students and practitioners the essential principles of spatial vector studies of the electrical forces of the heart. It is divided into two parts: an explanation of the vector method; and the clinical application.

In the first portion the authors use a great many analogies, which are a study in themselves. Possibly these could be deleted with little loss to the text. The subject is one difficult to understand without a basic knowledge of physics and three dimensional figures. Though the writers do not assume that the average reader understands these, their efforts to explain seem somewhat labored.

The second portion is concerned with the application of these principles. This is of more interest to the physician and throughout proves its thesis that the application of these studies will in time be of value to the cardiac specialist. It is emphasized that the method will make the memorizing of patterns of the electrocardiograph unnecessary, as well as explain the now somewhat obscure findings which occur occasionally in the normal tracing. Borderline tracing and the silent coronary will also in many cases be clarified with the method. It is true that the method is a more sensitive one which soon, with the help of experimenters like the authors of this book, should become another means of studying the dynamics of the heart.

—Zohora Ismail, M.D.

GOOD FOOD FOR BAD STOMACHS: 50 Delicious and Nutritious Recipes for Sufferers from Ulcers and Other Digestive Disturbances. By Sara M. Jordan, M.D., in charge of Gastroenterology, Lahey Clinic, Boston; and Sheila Hibben, "Markets and Menus," The New Yorker. 243 pages. Price, $2.95. Doubleday and Company, Inc., New York, 1951.

What more can a reviewer say than that a most distinguished specialist in gastroenterology (with a knowledge of the importance of good tasting food in the living of those unhappy individuals on restricted diets) has collaborated with a distinguished cook and author of cookbooks in the production of a volume on cookery? Here are 235 pages of tempting recipes which are therapeutically correct and not too difficult of preparation. An added advantage is that the diet is sufficiently appetizing that the non-dieting members of the family as well will enjoy the dieter's meals, and so the cook is spared the labor of preparing two sets.

—Ada Chree Reid, M.D.

CLINICAL AND ROENTGENOLOGIC EVALUATION OF THE PELVIS IN OBSTETRICS. By Howard Moloy, M.D., M.Sc., Assistant Clinical Professor of Obstetrics and Gynecology, College of Physicians and Surgeons, Columbia University, and the Sloan Hospital for Women. 119 pages, 68 figures. Price, $2.50. W. B. Saunders Company, Philadelphia and London, 1951.

This monograph is an excellent summary of the obstetric history-making research studies of the pelvis and the problem of cephalopelvic disproportion, which were begun by Caldwell and Moloy in the early 1930's and continued to the present by Moloy and his coworkers. Previously the only means of estimating the "ampleness" of a given pelvis for a safe term delivery was by manual examination and clinical judgment, too often subject to irretrievable error.

As a result of the author's study of skeletal pelves and of pelvic x-rays of clinical subjects, a new concept of types of pelvic architecture has been developed and is here described, as is also the technique of taking pelvimetry x-rays near term or at the onset of labor, and making accurate measurements of the pelvis and fetal head by means of the precision stereoscope.

By correlating these observations with the outcome of labor in a series of cases, the author has arrived at a new method of estimating cephalopelvic disproportion, which gives promise of having great value both in the prognosis and in the management of labor.

The book is written with clarity and is well illustrated with many diagrams, drawings, and x-ray pictures. It gives to the reader in brief concise form a good understanding of this new and important branch of obstetric diagnosis.

—Georgia Reid, M.D.

FROM DUGOUT TO HILLTOP. By Margaret R. Stewart, M.D. Pp. 233. Price, $3.75. Murray & Gee, Inc., Culver City, California, 1951.

The many steps in the transition from a dugout in Nebraska to a commission in the U. S. Public Health Service and appointment to top official positions in the Veterans Bureau, together with the many professional and personal problems solved along the way—all these make a romantic tale. The final attainment of a hilltop home is a happy culmination for a useful and what must have been a highly satisfactory life.

—Susan Wood

ALLERGY IN RELATION TO PEDIATRICS. By Bret Ratner, M.D. Professor of Clinical Pediatrics (Allergy) and Associate Professor of Immunology, New York Medical College; Attending Pediatrician, Flower and Fifth Avenue Hospitals; Director of Pediatrics, Sea View Hospital. Panel Discussion by T. N. Harris, M.D., and others. Pp. 228, 16 figures. Price, $3.75. Bruce Publishing Company, St. Paul, 1951.

This is a symposium written by specialists, the introduction and first chapter by Dr. Ratner, the 15 other chapters by pediatrists, allergists, pediatric-allergists, an immunologist, and a psychologist. In his introduction Dr. Ratner says: "This panel was designed to show on the one hand why pediatric allergy must be pursued as a subspecialty of both the parent specialties of pediatrics and allergy, and on the other to impart our specialized knowledge, cognizance of which should help generally in improving diagnosis and therapeutic skill in this age group." This is a thoroughly laudable aim and to a large extent the book fulfills its purpose. If it is designed primarily for allergists, however, its purpose is defeated, since the improvement in recognition and diagnosis of allergic conditions is sadly needed by pediatrists, whose practice is often to overlook allergic conditions or to make some "rule of thumb" tests or, worse still, to assure the mother that the child will "outgrow" the condition and that in allergic conditions "the treatment is worse than the disease."

There is a little overlapping in the chapters and a slight confusion of terminology. It is to be wished that the term "atopy" were discarded, since it seems to be one of the most confusing. Again, after an excellent discussion of antibodies and immunology in relation to allergy the words "hypo-sensitization" and "de-sensitization" are used, when immunization would be more accurate and descriptive. However, these are minor faults, and the brief but comprehensive discussions, particularly those on infection in the allergic child, critical evaluation of diagnostic tests, asthma before the

age of two, and office management of the allergic child, are straightforward and informative. The chapters on neurologic allergy and maternal rejection are short, inconclusive, and debatable.

The evaluation of the different types of skin tests may prove somewhat confusing, particularly in the chapter on their significance in respiratory and dermatologic allergy. Perhaps there is too much caution against the use of intradermal tests. Nevertheless, these chapters should be of great value to the general practitioner and the pediatrist and go a long way in explaining the allergists' use of these techniques.

The exact information given as to the time to immunize the allergic child to pertussis, tetanus, smallpox, and diphtheria is helpful, although this reviewer could never subscribe to the manner of restraining a child for skin tests described in the same chapter. The book serves a useful purpose in showing that "there is considerably more to the treatment of allergic disease than the blind following of a printed instruction sheet, however explicit the instructions may be." Let us hope that it is read and utilized by the proper practitioners.

—Leoni N. Claman, M.D.

ATLAS OF CROSS SECTION ANATOMY OF THE BRAIN: Guide to the Study of the Morphology and Fiber Tracts of the Human Brain. Fifth Section of Emil Villiger's BRAIN AND SPINAL CORD. Revised by Eugen Ludwig, Professor of Anatomy, University of Basel. ATLAS further revised by A. T. Rasmussen, Ph.D., Professor of Anatomy, University of Minnesota. Fourteenth Edition. 63 plates. Price $5.00. The Blakiston Company, Philadelphia, New York, Toronto, 1951.

This atlas makes available to students and teachers of neuro-anatomy a long awaited and valuable collection of a most complete and detailed series of Weigert sections of the human brain, drawn painstakingly by Dr. Emil Villiger himself from an exceptionally good collection of preparations at the University of Basel. In view of the usefulness of such illustrations, the Benno Schwabe and Company, Basel, the present publishers of the Villiger-Ludwig text, have made the plates available for a separate issue of the fifth section of Dr. Villiger's *Gehirn & Ruckenmark*, ably revised by Dr. Eugen Ludwig and now in its fourteenth edition. This convenient little book, the work of two masters, is further enhanced by no less an authority than Dr. A. T. Rasmussen, with the addition of carefully selected sagittal sections from the collection in the Department of Anatomy, University of Minnesota, clarifying many rostro-caudal and fronto-occipital relations, including the more specific designation of certain major subdivisions of the thalamic nuclei, and singling out the more prominent ones, in view of the current interest in this region of the brain.

In his preface, Dr. Rasmussen describes Dr. Villiger's series as the most practical yet available. He states that the planes of section are advantageous for introductory orientation. The obliquity of the frontal series of the upper part of the brain stem and cerebral hemisphere is ideal for making the transition from the midbrain to the diencephelon. The finest degree of tone and texture, recreated with painstaking care, is of inestimable value in following tracts, especially in mapping those that are obscurely delimited. The full page size of the cuts permit localization.

Careful indexing and the counterposing of two key figures of the brainstem opposite each microscopic plate showing the cuts from two different aspects, namely along a median sagittal section and on the ventral surface, facilitate orientation and are added features which contribute further to the value of this volume.

—Phiroza Santook Davar, M.B., B.S.

MEDICAL WOMEN'S INTERNATIONAL ASSOCIATION

All members of the American Medical Women's Association are invited to attend the scientific sessions and the social affairs arranged for the Council meeting of the MWIA. The meeting will be held next September in or near Paris; the exact time and place will be announced next month.

Under consideration is a plan of travel which includes transportation to and from the meeting and, in addition, a two weeks tour through Germany, France, Switzerland, and perhaps other countries, either before or after the meeting. Visits to scenes of medical as well as travel interest will be arranged. The tour need not be restricted to members of AMWA or to women physicians.

It is hoped that a large number of AMWA members will attend the meeting and join the group. If interested, please write for further details to the Business Manager, J.A.M.W.A., Suite 210, Two Lexington Avenue, New York 10, N. Y.

LAST CALL FOR THE DIRECTORY

The directory of members is now being prepared for printing. Was the listing of your name, address, and type of practice in the 1949 Yearbook correct? If you became a member since that Yearbook was published, was your name, address, and specialty correct as printed in the listing under New Members appearing in the JOURNAL? If any corrections are necessary, please send them before December 31, 1951 to Directory, J.A.M.W.A., Room 210, Two Lexington Avenue, New York 10, N. Y.

No changes in or additions to the Directory will be made after December 31, 1951.

8734-152

Journal of the AMERICAN MEDICAL WOMEN'S ASSOCIATION

Editor
ADA CHREE REID
New York, N. Y.

Associate Editor
DOROTHY W. ATKINSON
San Francisco, Calif.

Editorial Consultant
ELISE S. L'ESPERANCE
New York, N. Y.

VOLUME 6

January-December, 1951

Published Monthly
at 136 4th Ave., N., Nashville, Tennessee
By the American Medical Women's Association

INDEX, VOLUME 6

A

Acne cysts, management of (Goldberg), 349

Acne vulgaris; clinical trial of sulfur-resorcinol cream (Thomas and Hardy), 176

ACTH and cortisone in ocular disease (Nachod), 453

Adolescent clinic (Fliegel and Lief), 231

Ahlem, Judith, M.D., 358

Akalin, M.S., and Cambel, Perihan, Cancer in Turkey, 125

Album of women in medicine:
- Manuela Solis, M.D. (Canals), 61
- Jane Heartz Bell, M.D. (White), 62
- Helen Ahrens Cary, M.D. (Brodie), 114
- Fredrika Moore, M.D. (Lakeman), 115
- Jeanne Cecile Bateman, M.D. (Bernard), 148
- Lunette I. Powers, M.D. (Bernard), 194
- Connie M. Guion, M.D., 244
- Estella Ford Warner, M.D., (Bernard), 284
- Esther Pohl Lovejoy, M.D. (Bass), 354
- Amey Chappell, M.D. (Gambrell), 356
- Eleanor Anderson Campbell, M.D. (Bernard), 401
- A. Frances Foye, M.D. (Kittredge), 450
- May Davis Baker, M.D. (Kittredge), 451

Allergy, Current concepts in (Kailin), 427

Altmeyer, A. J., What should doctor know about social security, 395

American Gynecological Society, report of meeting (Logan), 319

American Women's Hospitals (Lovejoy), 193, 398, (Ray), 482

AMERICAN MEDICAL WOMEN'S ASSOCIATION:
- American Women's Hospitals, 193, 398, 482
- Around the world, 398, 482
- Annual meeting, 1951, report of, 360
- Award of merit, 359
- Board of Directors meeting, 119, 409
- Branch One, Woman's Medical Society, District of Columbia (Kittredge), 443
- Branches, news of, 63, 67, 118, 197, 246, 286, 326, 491, reports from, 361
- Committees, reports from, 362
  - Constitution and By-Laws, revision of, 147, 191
  - Nominating, 146
  - Opportunities, 486
- Editor's message (Reid), 40, 288
- New members, 64, 118, 192, 285, 408, 485
- Officers for 1951, 357
- President's inaugural address (Chappell), 350
  - message (Chappell), 285, 322, 407, 485
  - message (Waugh), 39, 63, 117, 146, 190, 243

Andersen, Leonora, and Kraff, Sonia, Bromide poisoning, 240

Anemia in women, Symposium on:
- Part I (Lamotte-Barillon), 1
- Part II, (Holly), 8

Antibiotic therapy, moniliasis, side effects of (Kyhos), 470

Anxiety, conscious, effect of, on electrocardiogram (Benedict), 419

Arango, Mercedes, Mobile medical units in Cuba, 60

Ash, Rachel, and others, Recent advances in pediatrics, 50

Ayers, Polly, and Browning, Grace, Dental aspects of school health program, 106

Azevedo, Nair de, Domitila de Carvalho, M.D., 280

B

Bacon, Emily P., and others, Recent advances in pediatrics, 50

Baker, May Davis, M.D. (Kittredge), 451

Barringer, Emily Dunning, Fifty years ago, 315, 327

Barthel, Elsa, M.D., Guest editor, 232

Bass, Elizabeth, Esther Pohl Lovejoy, M.D., 354
- These were the first, 452, 491

Bateman, Jeanne Cecile, M.D. (Bernard), 148

Bell, Jane Heartz, M.D. (White), 62

Benedek, Therese, Sexual cycle and personality, 335

Benedict, Ruth B., Effect of conscious anxiety on electrocardiogram, 419

Bernard, Marcelle, Jeanne Cecile Bateman, M.D., 148
- Lunette I. Powers, M.D., 194
- Estella Ford Warner, M.D., 284
- Rebecca Parrish, M.D., 317
- Eleanor Anderson Campbell, M.D., 401

Blackwell citations for 1951, 149

Blood, erythroblastosis (Coultas and Ferguson), 228
- leukemia research with laboratory mice (Dunn), 411

Bogatko, Frances H., Cyst of pericardium, 238

Breast, axillary tissue in radical mastectomies (Hood and Fleming), 393

Brigham, Alice, Home care service, George Washington University Cancer Clinic, 423

Brodie, Jessie L., Helen Ahrens Cary, M.D., 114

Bromide poisoning (Andersen and Kraff), 240

Brooks, Benjy F., Cystic fibrosis of pancreas, 468

Brown, C. Adele, M.D., Guest Editor, 84

Brown, C. Adele, Present day concept of school health programs, 83

Browning, Grace, and Ayers, Polly, Dental aspects of school health program, 106

Brucellosis, work of WHO in (Kaplan), 255

C

Callan, Margaret E., Intravenous procaine and curare therapy of tetanus, 439

Cambel, Perihan, and Akalin, M.S., Cancer in Turkey; mortality and ethnic distribution, 125

Campbell, Eleanor Anderson, M.D. (Bernard), 401

Canals, Dolores, Manuela Solis, M.D., first woman doctor of Spain, 61

Cancer clinic, George Washington University, home care service (Brigham), 423
- detection examination (Macfarlane), 143
- diagnosis by cytology (McGrew), 131
- diagnosis by cytology (Smith and Olsen), 138
- diagnosis of, early (Greisheimer), 140
- in Turkey: mortality and ethnic distribution (Cambel and Akalin), 125
- problem (Sano), 456
- registration and statistics, 142

Carvalho, Domitila de, M.D. (Azevedo), 280

Cary, Helen Ahrens, M.D. (Brodie), 114

Cary, Helen A., Development of school health program, 85, 116

Cassassa, M.T.,Pathology and hygiene of housework, 21

Chappell, Amey, M.D. (Gambrell), 356

Chappell, Amey, President's message, 285, 322, 350, 357, 407, 485

Chess, Dorothy A., Regional enteritis, 383

Child guidance clinic, traveling (Gronlund), 99

Children and youth, White House Conference on, report of (Cuthbert), 110
cutaneous tumors of (Spitz), 209
periodontal disease in (Kappler), 297
school-age health care for, World Health Organization, 113
with heart disease, management of (Doster), 101
Citizen participation in school health programs (Newman), 108
Clements, F. W., WHO nutrition program, 258
Cleveland, pioneer medical women and Women's and Children's Free Medical and Surgical Dispensary, 186
Climacteric, ovaries and anterior pituitary at (Greisheimer), 300
Clinic, adolescent (Fliegel and Lief), 231
cancer (Brigham), 423
Coccidioidomycosis (Mackler), 341
College health program (Nelson), 94
Conservation of hearing (Kozlowski), 105
Constable, Kate, Multiple sclerosis, 220
Correspondents, international, 292
Cortisone, ACTH and, in ocular disease (Nachod), 453
Coultas, Elizabeth, and Ferguson, Shirley, Erythroblastosis, 228
Cuba, mobile medical units in (Arango), 60
Curare, procaine and, therapy of tetanus, intravenous (Callan), 439
Cuthbert, Grace J., Mid-century White House Conference on Children and Youth, 110
Cytology, cancer diagnosis by (Smith and Olsen), 138
exfoliative (McGrew), 131

D

Danno, Dorothy P., Chronically discharging ear, 302
Death act, uniform simultaneous (Kennedy), 440
Dental aspects of school health program (Ayers and Browning), 106
Denver public school health program (Doster), 101
Dermatology, recent advances in (Thomas), 464
Displaced Persons Professional Medical Register, 142
Doster, Mildred, Management of children with heart disease, 101
Dratman, Mary B., and Pettit, Mary DeW., Endocrines in gynecology, 48
Dunn, Thelma B., Leukemia research with mice, 411

E

Ear, chronically discharging (Danno), 302
Education, medical, trends in (Fay), 475
pre-professional (Maher), 474
Electrocardiogram, effect of conscious anxiety on (Benedict), 419
Eliot, Martha M., World Health Organization, 57
Endocrines in gynecology (Pettit and Dratman), 48
Endocrinology, recent advances in (Finkler), 305
Enlows, Ella M. A., Recent advances in field of otolaryngology, 345
Enteritis, regional (Chess), 383
Erythroblastosis(Coultas and Ferguson), 228
Eye, perforating injury of (Sitchevska), 233
ACTH and cortisone in disease of (Nachod), 453

F

Family life and sex education (Randall), 96
Fay, Marion, Trends in medical education, 475
Fellowships, National Foundation for Infantile Paralysis, 321
Ferguson, Shirley, and Coultas, Elizabeth, Erythroblastosis, 228
Fertility of man in cases of primary and secondary infertile couples (Mazoulis), 173
Fifty years ago (Barringer), 313
Finkler, Rita S., Recent advances in endocrinology, 305
First, these were the (Bass), 452, 491
Fleming, Ruth, and Hood, T. K., Axillary tissue in radical mastectomies, 393
Flemming, Roberta M., Pierra Hoon Vejjabul, M.D., 279
Fliegel, Hilda C., and Lief, Nina, Adolescent clinic, 231
Foreign missions, medical women in (Millican), 478
Foye, A. Frances, M.D. (Kittredge), 450
Frederic, Sister M., M.D., 366
Fulbright awards for 1952-53, 359

G

Gambrell, W. Elizabeth, Amey Chappell, M.D., 356
Gilmour, Mary D., Congress of Radiology, 55
Goldberg, Natalie D., Management of acne cysts, 349
Goldfeder, Anna, Congress of Radiology, 56
Gordon, B., Privileges of medicine, 472
Greece, AWH nurses in (Lovejoy), 193
Greenberg, M., Immunization procedures, 385
Greisheimer, Esther M., Early diagnosis of cancer, 140
Fitness of heart, 54
Ovaries and anterior pituitary at climacteric, 300
Postmenopausal osteoporosis, 183
Gronlund, Anna A., Traveling child guidance clinic, 99
Guion, Connie M., M.D., 244
Gundersen, Herdis, Medical women in Norway, 281
Guthe, T., and Reynolds, F. W., Non-venereal treponematosis, 251
Gynecology, endocrines in (Pettit and Dratman), 48

H

Hall, K. C., What should the doctor know about investing? 144
Hamilton, Alice, Developments in field of industrial medicine, 313, 327
Hammond, Lois, and others, Recent advances in pediatrics, 50
Hardy, Marjorie K., and Thomas, Carmen C., Acne vulgaris; clinical trial of sulfur-resorcinol cream, 176
Heald, Elizabeth S., Roentgen examination of urinary tract, 375
Health care for school-age children, World Health Organization, 113
Health service, student, in medical college (Klinghoffer), 477
Hearing, conservation of (Kozlowski), 105
Heart disease, management of children with (Doster), 101
fitness of (Greisheimer) 54
neoplasms of (Pfeiffer), 293
Henderson-Smathers, Irma, M.D., 359
Holly, Pearl B., Anemia in women, 8
Home care service, George Washington University Cancer Clinic (Brigham), 423
Hood, T. K., and Fleming, Ruth, Axillary tissue in radical mastectomies, 393
Housework, pathology and hygiene of, symposium, Part I (Seidelin), 12
Part II (Cassassa), 21
Hygiene of housework, pathology and, symposium, Part I, (Seidelin), 12
Part II, (Cassassa), 21
Hysterosalpingograms, value of (Wittner), 225

I-J

Immunization procedures (Greenberg), 385
Industrial medicine, developments in (Hamilton), 313
Infertile couples, fertility of man in cases of primary and secondary (Mazoulis), 173
International Congress of Ophthalmology, report of meeting (Sitchevska), 185
International Congress of Radiology, report of meeting (Gilmour and Goldfeder), 55, 56
International understanding, medical women and (Reid), 27
Investing, what should doctor know about (Hall), 144

Japan, medical women in (Kawai), 352
Jordan, Sara Murray, M.D., Blackwell citation, 150

K

Kahler, Elizabeth, M.D., 358
Kailin, Eloise W., Current concepts in allergy, 427
Kaplan, M. M., Work of WHO in brucellosis, 255
Kawai, Yaeko, Medical women in Japan, 352
Kennedy, Irene, Uniform simultaneous death act, 440
Kittredge, Elizabeth, M.D., Guest editor (Platt), 442
Kittredge, Elizabeth, A. Frances Foye, M.D., 450
May Davis Baker, M.D., 451
Woman's Medical Society District of Columbia, 443
Klinghoffer, June, Role of student health service in medical college, 477
Knopf, Ann, Rickettsialpox, 237
Kozlowski, Emily A., Conservation of hearing, 105
Kraff, Sonia, and Andersen, Leonora, Bromide poisoning; report of two cases, 240
Kyhos, Emma D., Moniliasis: side effects of antibiotic therapy, 470

L

Lakeman, Mary R., Fredrika Moore, M.D., 115
Lamotte-Barillon, S., Anemia in women, 1
Lasker Awards, 488
LeMarquis, Antoinette, M.D., 357
L'Esperance, Elise S., M.D., Lasker award, 488
Leukemia research with laboratory mice (Dunn), 411
Lief, Nina, and Fliegel, Hilda C., Adolescent clinic, 231
Lincoln, Edith Maas, M.D., Blackwell citation, 151
Logan, Barbara, American Gynecological Society, 319
Los Angeles public schools, family life and sex education in (Randall), 96
Lovejoy, Esther P., M.D., (Bass), 354
Lovejoy, Esther P., AWH nurses in Greece, 193
Lovejoy, Esther P., and Reid, Ada Chree, Medical Women's International Association, 1919-1950, 29

M

Macfarlane, Catherine, M.D., Lasker award, 488
Macfarlane, Catharine, Cancer detection examination, 143
Mackler, Helen, Coccidiodomycosis, 341
Maher, Irene E., Pre-professional education, 474
Manter, Marion E., M.D., Blackwell citation, 151
Marting, Esther, M.D., 358
Mary Johnston Hospital, Manila, P.I. (Bernard), 317
Mastectomies, axillary tissue in (Hood and Fleming), 393
Mazoulis, V. G., Fertility of man in cases of primary and secondary infertile couples, 173
McGrew, Elizabeth A., Exfoliative cytology, 131
McIntosh, Jean N., Royal Sanitary Congress Health Institute, 277
Medical education, trends in (Fay), 475
Medical Ethics, International Code of, 59
Medical school news (Dodge), 67, 286
student, training of, 474, 475
women and international understanding (Reid), 27
women around the world:
Pierra Hoon Vejjabul, M.D., 279
Domitila de Carvalho, M.D., 280
women in foreign missions (Millican), 478
women in Japan (Kawai), 352
women in Norway (Gundersen), 281
women, pioneer, of Cleveland, 186
Medical Women's International Association, 1919-1950 (Lovejoy and Reid), 29
Women's International Association, its work and aims (Ruys), 25
Women's International Association, Sixth Congress, 1
Medicine, industrial, developments in (Hamilton), 313
privileges of, (Gordon), 472
Meningitis, meningococcemia with, in infant (Sloan and Ross), 234
Meningococcemia with meningitis in infant, (Sloan and Ross), 234
Mermod, Camille, M.D., 359
Millican, Edith, Medical women in foreign missions, 478
Toxemia of pregnancy, etiology of, 167
Mobile medical units in Cuba (Arango), 60
Moniliasis; side effect of anti-biotic therapy (Kyhos), 470
Moore, Fredrika, M.D., (Lakeman), 115
Morgan, Agnes Fay, Recent developments in vitamin research, 179
Multiple sclerosis (Constable), 220

N

Nachod, Grace R., ACTH and cortisone in ocular disease, 453
and others, Recent advances in pediatrics, 50
Nelson, Marjory J., College health program, 94
Neoplasms of heart (Pfeiffer), 293
New York Infirmary (Vanderlip), 242
Blackwell citations presented, 149
Newman, Helen C., Citizen participation in school health programs, 108
News of women in medicine, 65, 121, 149, 152, 195, 196, 245, 282, 323, 366, 402, 488
Norway, medical women in (Gunderson), 281
Nutrition, WHO program (Clements), 258

O

Olney, Mary B., Problems in pediatrics, 380
Olsen, Margit, and Smith, J. T., Cancer diagnosis by cytology, 138
Ophthalmology, Congress of (Sitcheyska), 185
Opportunities for women in medicine, 41, 116, 410, 484
Osteoporosis, postmenopausal (Greisheimer), 183
Otolaryngology, recent advances in field of (Enlows), 345
Ovaries and anterior pituitary at climateric (Greisheimer), 300

P

Pancreas, cystic fibrosis of (Brooks), 468
Parrish, Rebecca, M.D. (Bernard), 317
Pathology and hygiene of housework, symposium, Part I (Seidelin), 12
Part II (Cassassa), 21
Pearce, Louise, M.D., Blackwell citation, 151
Pediatrics, problems in (Olney), 380
recent advances in (Bacon and others), 50
Peptic ulcer, medical aspects of (Willard), 46
Pericardium, cyst of (Bogatko), 238
Periodontal disease in children (Zappler), 297
Personality, sexual cycle and (Benedek), 335
Pettit, Mary DeW., and Dratman, Mary B., Endocrines in gynecology, 48
Pfeiffer, Mildred C. J., Neoplasms of heart, 293
Philadelphia, school health program in (Weaver), 87
Philippine Islands, AWH in, 398
Physiology, modern concepts of (Greisheimer), 54, 140, 183, 300
Pituitary, anterior, and ovaries at climateric (Greisheimer), 300
Platt, Lois I., Elizabeth Kittredge, M.D., Guest editor, 442
Women doctors in Washington today, 446
Postmenopausal osteoporosis (Greisheimer), 183
Postpartum complication, unusual (Renshaw), 438
Powers, Lunette I., M.D. (Bernard), 194
Pregnancy, toxemia of, etiology of (Millican), 167
toxemia of, management of (Taylor), 171
toxemia of, prevention of (Waugh), 169

Problem clinic:
Uniform simultaneous death act (Kennedy), 440
What should doctor know about investing? (Hall), 144
What should doctor know about social security? (Altmeyer), 395
Procaine and curare therapy of tetanus, intravenous (Callan), 439
Publications, current, of women in medicine, 68, 154, 203, 329, 370

R

Radiology, Sixth International Congress of (Gilmour and Goldfeder), 55, 56
Ragland, Wilhelmina A., M.D., Blackwell citation, 151
Randall, Harriett B., Family life and sex education, 96
Ray, Margaret, Experiment in world friendship, 482
Recent advances in dermatology (Thomas), 464
in endocrinology (Finkler), 305
in otolaryngology (Enlows), 345
in pediatrics (Bacon and others), 50
Recent developments in vitamin research (Morgan), 179
Reid, Ada Chree, First Branch number, 442
Medical women and international understanding, 27
World Health Organization, 249
Reid, Ada Chree, and Lovejoy, Esther P., Medical Women's International Asociation, 1919-1950, 29
Renshaw, Josephine E., Postpartum complication, 438
Reports of Proceedings:
American Gynecological Society (Logan), 319
Congress of Ophthalmology (Sitschevska), 185
International Congress of Radiology (Gilmour and Goldfeder), 55, 56
Royal Sanitary Institute Health Congress (McIntosh), 277
White House Conference on Children and Youth (Cuthbert), 110
Reynolds, F. W., and Guthe, T., Non-venereal treponematosis, 251
Rickettsialpox (Knopf), 237
Roentgen examination of urinary tract (Heald), 375
Romaine, Adelaide, M.D., 358
Ross, Lucille, and Sloan, Beatrice S., Meningococcemia with meningitis in infant, 234
Royal Sanitary Institute Health Congress, report of meeting (McIntosh), 277
Ruys, A. Charlotte, Medical Women's International Association, its work and aims, 25

S

Sabin, Florence, M.D., Lasker award, 488
Sano, M. E., Cancer problem, 456
School health programs, child guidance (Gronlund), 99
citizen participation (Newman), 108
conservation of hearing (Kozlowski), 105
dental aspects of (Ayers and Browning), 106
development of (Cary), 85
family life and sex education (Randall), 96
in Philadelphia (Weaver), 87
management of children with heart disease Doster), 101
opportunities for women in medicine, 116
present day concept of (Brown), 83
Schwerma, Kathryn, Effective management of tuberculosis patient, 43
Sclerosis, multiple (Constable), 220
Seidelin, Gerda, Pathology and hygiene of housework, 12
Sex education, family life and (Randall), 96
Sexual cycle and personality (Benedek), 335
Sitchevska, Olga, Congress of Ophthalmology, 185
Perforating injury of eye, 233
Skin, tumors of, in childhood (Spitz), 209
Sloan, Beatrice S., and Ross, Lucille, Meningococcemia with meningitis in infant, 234
Smith, J. T., and Olsen, Margit, Cancer diagnosis by cytology, 138
Social security, what should doctor know about (Altmeyer), 395
Solis, Manuela, M.D., first woman doctor of Spain (Canals), 61
Spitz, Sophie, Cutaneous tumors of childhood, 209
Stenhouse, Evangeline E., M.D., 357
Student health service in medical college, role of (Klinghoffer), 477
Sulfur-resorcinol cream, clinical trial, in acne vulgaris (Thomas and Hardy), 176
Sykes, Sarah E., Dysfunctional uterine bleeding, 460

T

Taylor, Ann Gray, Toxemia of pregnancy, management of, 171
Teeth, periodontal disease in children (Zappler), 297
Tetanus, intravenous procaine and curare therapy (Callan), 439
Thomas, Carmen C., M.D., Guest Editor, 473
Thomas, Carmen C., Recent advances in dermatology, 464
Thomas, Carmen C., and Hardy, Marjorie K., Acne vulgaris; clinical trial of sulfur-resorcinol cream, 176
Time is the present, The (Chappell), 350
Tokyo Women's Medical College Hospital, 353
Toxemia of pregnancy, etiology of (Millican), 167
of pregnancy, management of (Taylor), 171
of pregnancy, prevention of (Waugh), 169
Traveling child guidance clinic (Gronlund), 99
Treponematosis, non-venereal (Reynolds and Guthe), 251
Tuberculosis, effective management of patient with (Schwerma), 43
Tumors, cutaneous, of childhood (Spitz), 209
of heart (Pfeiffer), 293
Turkey, cancer in, mortality and ethnic distribution (Cambel and Akalin), 125

U-V

Ulcer, peptic, medical aspects of (Willard), 46
United States armed services, status of women physicians in, 39, 41
Urinary tract, roentgen examination of (Heald), 375
Uterus, abnormalities of (Wittner), 225
dysfunctional bleeding (Sykes), 460
Vanderlip, Narcissa, New York Infirmary, 242
Vejjabul, Pierra Hoon, M.D. (Flemming), 279
Vitamin research, recent developments (Morgan), 179
von Langermann, Georgianna, M.D., 358

W-Z

Warner, Estella Ford, M.D. (Bernard), 284
Washington, women doctors in, today, statistical survery (Platt), 446
Waugh, Elizabeth, President's message, 39, 63, 117, 146, 190, 243
Toxemia of pregnancy, prevention of, 169
Weaver, Ruth H., School health services in Philadelphia, 87
White, Agnes H. T., Jane Heartz Bell, M.D., 62
White House conference on children and youth, report of (Cuthbert), 110
Willard, J. H., Medical aspects of peptic ulcer, 46
Wittner, Asta J., Diagnosis of uterine abnormalities, 225
Woman's Medical Society of District of Columbia, history of (Kittredge), 443
Women, anemia in, symposium,
Part I (Lamatte-Barillon), 1
Part II (Holly), 8
doctors in Washington today, statistical survey (Platt), 446

Woolley Memorial Lecture of 1951 (Benedek), 335
World Health Organization (Eliot), 57
activities of, 249, 261, 481
cancer registration and statistics, 142
fellowships, 176, 484
health care for school-age children, 113
nutrition program (Clements), 258
work of, in brucellosis (Kaplan), 255
World Medical Association, Fourth General Assembly, 58
Zappler, Sylvia E., Periodontal disease in children, 297

BOOK NOTICES:

ACTH Conference, Second Clinical, 406
Aging Population, Social and Biological Challenge, 248
Alcoholic, Hope and Help for (Lovell), 405
Allergy in Relation to Pediatrics (Ratner), 493
Alsop, Gulielma F., History of the Woman's Medical College of Pennsylvania, 1850 to 1950, 247
Alvarez, W. C., The Neuroses, 290
American Medical Dictionary (Dorland), 328
American Medical Association:
Handbook of Nutrition, 405
New and Nonofficial Remedies 1951, 492
Primer on Fractures, 166
Anatomy, Atlas of Human (Anson), 123
Anatomy, Functional, of Limbs and Back (Hollinshead), 202
Anatomy in Surgery (Thorek), 404
Anson, B. J., Atlas of Human Anatomy, 123

Bases of Human Behavior (Saul), 289
Berens, C., and Siegel, E., Encyclopedia of Eye: Diagnosis and Treatment, 200
Berman, J. K., Principles and Practice of Surgery, 124
Binocular Vision (Ogle), 124
Biological Foundations of Health Education, 79
Brain, Atlas of Cross Section Anatomy of (Villiger-Ludwig-Rasmussen), 494
Brasset, E., Doctor's Pilgrimage, 492
Bray, W. E., Clinical Laboratory Methods, 369
Brody, William, Personnel Administration in Public Health Nursing, 290
Bronchoesophagology (Jackson and Jackson), 124

Cass, Marion T., Speech Habilitation in Cerebral Palsy, 405
Cecil, R. L., and Loeb, R. F., Editors, Textbook of Medicine, 368
Celiac Disease, Management of (Haas and Haas), 405
Cerebral Palsy (Pohl), 81
Cerebral Palsy, Speech Habilitation in (Cass) 405
Check: Community Health Educator's Compendium of Knowledge (Turner), 248
Cheney, G., Medical Management of Gastrointestinal Disorders, 80
Childhood and Adolescence, Endoctrine Disorders in (Wilkins), 81
Children, Growth and Development of (Watson and Lowrey), 405
Cleckley, Mask of Sanity, 79
Clinical Laboratory Methods (Bray), 369
Colonna, P., Regional Orthopedic Surgery, 166
Conn, H. F., Editor, Current Therapy, 1951, 202
Cunningham, Bess V., Psychology for Nurses, 201
Current Therapy, 951 (Conn), 202
Cushman, Beulah, Manual for Objective Examination of Ocular Muscle Balance, 200
Cytology of Human Vagina (DeAllende and Orias), 166

DeAllende, Ines L. C., and Orias, O., Cytology of Human Vagina, 166
DePalma, A. F., Surgery of Shoulder, 82
DeSanctis, A. G., and Varga, C., Handbook of Pediatric Medical Emergencies, 368
Diabetes Mellitus (Duncan), 291
Diagnosis and Treatment of Endocrine Disorders in Childhood and Adolescence (Wilkins), 81
Diagnosis, Physical (Major), 247
Dictionary, English-German (Schoenewald), 247
Doctor's Pilgrimage (Brasset), 492
Dorland, W. A. N., American Medical Dictionary, 328
Dugout to Hilltop (Stewart), 493
Duncan, G. G., Diabetes Mellitus, 291
Dysmenorrhea, Symposium on (Greiner), 291

Electrocardiography, Clinical Unipolar (Lipman and Massie), 405
Electrocardiography, Spatial Vector (Grant and Estes), 493
Electroencephalography (Schwab), 404
Endocrine Disorders in Childhood and Adolescence (Wilkins), 81
Eternal Eve, History of Gynaecology and Obstetrics (Graham), 291
Eye, Encyclopedia of: Diagnosis and Treatment (Berens and Siegel), 200
Eye Manifestations of Internal Diseases (Tassman), 369
Eye, Manual for Objective Examination of Ocular Muscle Balance (Cushman), 200
Eyes and Industry (Kuhn), 81

Fisher, J. T., and Hawley, L., Few Buttons Missing, 406
Food, Good, for Bad Stomachs (Jordan and Hibben), 493
Fractures, Primer on, A.M.A., 166

Gastrointestinal Disorders, Medical Management of (Cheney), 80
Genealogy of Gynecology (Ricci), 79
Genital Tract, Malignant Diseases of Female (Way) 291
Graham, M., Eternal Eve, History of Gynaecology and Obstetrics, 291
Grant, R. P., and Estes, E. H., Spatial Vector Electrocardiography, 493
Greenhill, J. P., Principles and Practice of Obstetrics, 368
Greiner, Meta L., Editor, Symposium on Dysmenorrhea, 291
Grimes, J. M., When Minds Go Wrong, 247
Gynaecology and Obstetrics, History of (Graham), 291
Gynecology, Genealogy of (Ricci), 79
Gynecology, Practical (Reich), 81

Haas, S. V., and Haas, M. P., Management of Celiac Disease, 405
Hamilton, K. W., Counseling Handicapped in Rehabilitation Process, 82
Handicapped, Counseling, in Rehabilitation Process (Hamilton), 82
Hanlon, J. J., Principles of Public Health Administration, 82
Harrison, T. R., Editor-in-Chief, Principles of Internal Medicine, 200
Harvey Lectures, 1947-1948, 80
Health Education, Biological Foundations of, 79
Health, Science of (Meredith), 202
Heart and Circulation, Diseases of (Wood), 290
Heart Disease, Clinical (Levine), 492
Herrman, G. R., Methods in Medicine, 290
Hollinshead, W. H., Functional Anatomy of Limbs and Back, 202
Human Behavior, Bases of (Saul), 289
Hyman, H. T., Progress Volume, 123

Industry, Eyes and (Kuhn), 81
Integrated Practice of Medicine (Hyman), 123
Internal Medicine, Principle of (Harrison), 200

Jackson, Chevalier, and Jackson, Chevalier L., Bronchoesophagology, 124

Jordan, Sara J., and Hibben, Sheila, Good Food for Bad Stomachs, 493
Khorozian, K. G., Microkaryocytes, Fourth Corpuscles, and their Function, 328
Kuhn, Hedwig S., Eyes and Industry, 81

Laboratory Methods, Clinical (Bray), 369
Levine, S. A., Clinical Heart Disease, 492
Limbs and Back, Functional Anatomy of (Hollinshead), 202
Lipman, B. S., and Massie, E., Clinical Unipolar Electrocardiography, 405
Lovell, H. M., Hope and Help for the Alcoholic, 405

MacLeod, Lily, Return to Life, 248
Major, R. H., Physical Diagnosis, 247
Malignant Disease of Female Genital Tract (Way), 291
Mask of Sanity (Cleckley), 79
Massage and Movements, Manual of (Prosser), 404
McCurdy, R. N. C., The Rhesus Danger, 82
Medicine, Internal, Principles of (Harrison), 200
Medicine, Methods in (Herrman), 29
Medicine of the Years 1951 (Youmans), 289
Medicine, Textbook of (Cecil and Loeb, Editors), 368
Meredith, Florence L., Science of Health, 202
Microkaryocytes, Fourth Corpuscles, and their Function (Khorozian), 328
Minds Go Wrong, When (Grimes), 247
Moloy, H., Clinical and Roentgenological Evaluation of Pelvis in Obstetrics, 493
Mons, W., Principles and Practice of Rorschach Personality Test, 328
Moore, R. A., Textbook of Pathology, 492

Narcotic Drugs, Report of Commission on, United Nations Publication, 406
Neuroses, The (Alvarez), 290
New and Nonofficial Remedies, 1951, (AMA), 492
New England Female Medical College (Waite), 289
Newborn Infant, Physiology of (Smith), 369
Nurses, Psychology for (Cunningham), 201
Nurition, Handbook of (AMA), 405

Obstetric Difficulties, Management of (Titus), 80
Obstetrics, Clinical and Roentgenological Evaluation of Pelvis in (Moloy), 493
Obstetrics, Principles and Practice of (Greenhill), 368
Ocular Muscle Balance, Manual for Objective Examination of (Cushman), 200
Ogilvie, Sir H., and Thompson, W.A.R., Editors, Pain and Its Problems, 368
Ogle, K. N., Binocular Vision, 124
Orthodontics, Principles of (Salzman), 123
Orthopedic Surgery, Regional (Colonna), 166

Pain and Its Problems (Ogilvie and Thompson, Editors), 368
Pathology, Textbook of (Moore), 492
Pediatric Medical Emergencies, Handbook of (DeSanctis and Varga), 368
Pediatrics, Allergy in Relation to (Ratner), 493
Pelvis, Clinical and Roentgenological Evaluation of, in Obstetrics (Moloy), 493
Physical Diagnosis (Major), 247
Physiology of Newborn Infant (Smith), 369
Plastic and Reconstructive Surgery (Smith), 79
Pohl, J. F., Cerebral Palsy, 81
Primer on Fractures, A.M.A., 166
Principles and Practice of Obstetrics (Greenhill), 368
Principles and Practice of Rorschach Personality Test (Mons), 328
Prosser, Edith M., Manual of Massage and Movements, 404
Psychology for Nurses (Cunningham), 201
Public Health Administration (Hanlon), 82
Public Health Nursing, Personnel Administration in (Brody), 290

Radiotherapy, Short Textbook of (Walter), 123
Ratner, B., Allergy in Relation to Pediatrics, 493
Rehabilitation Process, Counselling Handicapped in (Hamilton), 82
Reich, R. J., Practical Gynecology, 81
Return to Life (MacLeod), 248
Rhesus Danger (McCurdy), 82
Ricci, J. A., Genealogy of Gynecology, 79
Rorschach Personality Test, Principles and Practice of (Mons), 328

Salzmann, J. A., Principles of Orthodontics, 123
Sanity, Mask of (Cleckley), 79
Saul, L. J., Bases of Human Behavior, 289
Schoenewald, F. S., English-German Medical Dictionary, 247
Schwab, R. S., Electroencephalography, 404
Science of Health (Meredith), 202
Shanks, S. C., and Kerley, P., Editors, Text-Book of X-Ray Diagnosis, 200
Shoulder, Surgery of (DePalma), 82
Smith, C. A., Physiology of Newborn Infant, 369
Smith, F., Plastic and Reconstructive Surgery, 79
Social and Biological Challenge of our Aging Population, 248
Speech Habilitation in Cerebral Palsy (Cass), 405
Steroids in Experimental and Clinical Practice, Symposium on (White), 404
Stewart, Margaret R., From Dugout to Hilltop, 493
Surgery, Anatomy in (Thorek), 404
Surgery of Shoulder (DePalma), 82
Surgery, Plastic and Reconstructive (Smith), 79
Surgery, Principles and Practice of (Berman), 124
Surgery, Regional Orthopedic (Colonna), 166
Surgery, Thoracic (Sweet), 248
Surgical Forum, American College of Surgeons, Clinical Congress, 291
Sweet, R. H., Thoracic Surgery, 248

Tassman, I. S., Eye Manifestations of Internal Diseases, 369
Therapy, Current, 1951 (Conn), 202
Thoracic Surgery (Sweet), 248
Thorek, P., Anatomy in Surgery, 404
Titus, P., Management of Obstetric Difficulties, 80
Turner, C. E., Check: Community Health Educator's Compendium of Knowledge, 248

Vagina, Cytology of Human (DeAllende and Orias), 166
Villiger-Ludwig-Rasmussen, Atlas of Cross Section Anatomy of Brain, 494

Waite, F. C., History of the New England Female Medical College, 289
Walter, J., Short Textbook of Radiotherapy, 123
Watson, E. H., and Lowrey, G. H., Growth and Development of Children, 405
Way, S., Malignant disease of the Female Genital Tract, 291
White, A., Editor, Symposium on Steroids in Experimental and Clinical Practice, 404
Wilkins, L., Diagnosis and Treatment of Endocrine Disorders in Childhood and Adolescence, 81
Woman's Medical College of Pennsylvania, History of, 1850 to 1950 (Alsop), 247
Wood, Paul, Diseases of the Heart and Circulation, 290

X-Ray Diagnosis, Text-book of (Shanks and Kerley, Editors), 200

Youmans, J. B., Medicine of the Year, 1951, 289

WE THANK YOU . . .

For your fine cooperation. As far as we know, we have received a far better return on our readership Survey than is usual on such a questionnaire. But we're a little greedy—and we ask those of you who have not yet sent in your answers to do so before the end of the year.

Many of the thoughts and suggestions you have given on the editorial questions have been a great help to the Editor. If you wish to express your preference for types of editorial content, your Editor will be pleased to supply such articles as you request.

AMERICAN MEDICAL WOMEN'S ASSOCIATION, INC.

APPLICATION FOR MEMBERSHIP

Name .....Date .....
(Please print as you wish it to appear in the Directory)

Address .....

.....

Medical School .....Year of Graduation .....

Licensed in County .....State .....

Specialty .....Year of Certification .....

Date and Place of Birth .....

Medical Society Affiliations .....

.....

Hospital and Faculty Appointments .....

.....

.....

Public Health, Government or Industrial Appointments .....

.....

951

Continued on following page

EDITORIAL FORECAST
January, 1952

This number of the JOURNAL will have several articles in the field of Public Health, collected under the supervision of Dr. Florence L. Marcus.

"Evolution in the Field of Medical Care," by Ellen C. Potter, M.D.

"Heart Disease is a Public Health Problem," by Mary L. Richardson, M.D.

"Completed Medicine—Rehabilitation," by Nila Kirkpatrick Covalt, M.D.

In addition there will be:

"Statistical Survey of Stillbirths and Neonatal Deaths at the Hospital of Woman's Medical College of Pennsylvania," by Anne H. Pike, M.D.

"Fluid Therapy," by Esther M. Greisheimer, M.D., one of a series of articles on Current Concepts of Physiology.

MEMBERSHIP APPLICATION, Continued

Check Membership desired:

☐ Annual—Dues $10.00 ☐ Life—$200.00 (may be paid in two installments)

☐ Associate—no dues (Associate membership open to medical women in the first two years after graduation to women internes and residents-in-training, and to fellows).

Life, Annual, and Associate members receive the official publication, the
JOURNAL OF THE AMERICAN MEDICAL WOMEN'S ASSOCIATION.

Life and Annual members receive membership in the Medical Women's International Association.

Endorsers: 1.....M.D., Member A. M. W. A.

Address:.....

2.....M.D., Member A. M. W. A.

Address:.....

(Membership in County or State Medical Society will be accepted in place of the above endorsements.)

Signature .....

Checks payable to the American Medical Women's Association, Inc., must accompany application. Mail to Treasurer, A.M.W.A., Box 98, Madison Square Station, New York 10, N. Y.

You may prescribe "RAMSES"† Vaginal Jelly with full confidence in its safety and effectiveness. No vaginal jelly available provides a greater degree of spermicidal or barrier action than does "RAMSES" Vaginal Jelly.

IMMOBILIZES SPERM IN THE *FASTEST TIME* RECOGNIZED FOR CHEMICAL CONTRACEPTIVES *

* This immobilization time is measured by the Brown and Gamble technique, the only method accepted by the Advisory Committee on Contraceptives of the Council on Pharmacy and Chemistry of the American Medical Association for determining the sperm immobilization time of chemical contraceptives.

gynecological division

Julius Schmid, Inc.

423 West 55th Street, New York 19, N. Y.

quality first since 1883

TRADEMARK OF Ramses DEPENDABILITY

†The word "RAMSES" is a registered trademark of Julius Schmid, Inc.

what do you look for in an x-ray machine?

is it **value** ?

Rightly, you regard the purchase of an x-ray machine as a *long-term investment*. You'll get year after year of faithful service from a Picker machine; it's honestly built of fine materials by painstaking craftsmen, without skimp or compromise.

is it **ease** of operation?

The automatic monitor control principle was pioneered by Picker; we have led the industry ever since in reducing the complexity and increasing the certainty of x-ray operation. Picker machines are noted for the smooth, quiet way they run . . . for the ease with which they "handle."

is it a **name** you can trust?

Building fine apparatus is a habit of over half a century's standing with Picker. Wherever quality counts . . . in hospital x-ray departments, in the offices of distinguished radiologists the world over, you will find Picker equipment highly regarded. And your investment will always be safeguarded by an alert service organization which has won an enviable reputation for devotion to the customer's interest.

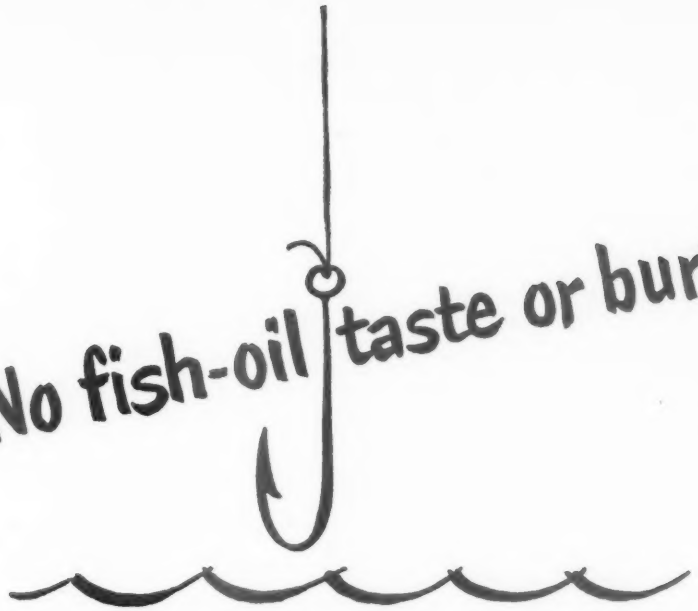
then it's a **Picker** machine that you want

Users say the Picker "Constellation" x-ray table is without peer in the range of things it can do, and the efficiency with which it does them. Perhaps the nature of your practice does not require such versatility; somewhere in the broad Picker line there's a model exactly suited to your professional demands.

Picker x-ray

all you expect . . . and more

PICKER X-RAY CORPORATION
25 South Broadway, White Plains, N. Y.



New Multivitamin Tablet Contains Synthetic Vitamin A . . .

Plus B_{12} . . . PLUS 7 OTHER IMPORTANT VITAMINS

Even finicky patients like DAYALETS, the fishless, burpless multivitamin tablets. No fish-oil odor, taste or aftertaste, no allergies due to fish oils—because they contain no fish oil.

Small and easy to swallow, these hard, compressed tablets can't leak, won't stick together in the bottle. DAYALETS are better tolerated by patients than soft gelatin capsules. Vanilla flavored and sugar coated. In bottles of 50, 100 and 250. Abbott

Each DAYALET tablet contains:

Vitamin A (synthetic vitamin A palmitate)	10,000 U. S. P. units
Vitamin D (Viosterol)	1000 U. S. P. units
Thiamine Mononitrate	5 mg.
Riboflavin	5 mg.
Nicotinamide	25 mg.
Pyridoxine Hydrochloride	1.5 mg.
Vitamin B_{12} (as vitamin B_{12} concentrate)	1 mcg.
Pantothenic Acid (as calcium pantothenate)	5 mg.
Ascorbic Acid	100 mg.

NO FISH-OIL TASTE OR BURP

Dayalets

TRADE MARK

(ABBOTT'S MULTIPLE VITAMINS)

Only Terramycin in *Oral Drops* offers *all* these advantages

1

convenience of a liquid concentrate

Crystalline Terramycin Hydrochloride Oral Drops provide 200 mg. per cc., 50 mg. in each 9 drops—the only broad-spectrum antibiotic available as a liquid concentrate affording optimal convenience and flexibility in dosage schedules.

2

cibility with foods and fluids

Terramycin Oral Drops are miscible with most foods, milk and fruit juices; can be taken "as is" or mixed. Potent oral drops offer rapid broad-spectrum antibiotic activity in a form permitting the utmost simplicity in the therapeutic regimen.

3

pure crystalline compound—well tolerated

Terramycin Oral Drops are prepared from pure crystalline material, free of impurities which may contribute to adverse reactions.

supplied:
2.0 Gm. with 10 cc. of diluent, and specially calibrated dropper.

ANTIBIOTIC DIVISION Pfizer CHAS. PFIZER & CO., INC., *Brooklyn 6, N. Y.*